

BIRDS OF THE RAJPIPLA FORESTS — SOUTH GUJARAT¹

WITH NOTES ON NESTS FOUND AND BREEDING RECORDED
&
SOME NEW OBSERVATIONS

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INTRODUCTION

The Rajpipla forests, once the hunting preserve of the Maharaja of Rajpipla, lie in S.E. Gujarat at the western extremity of the Satpura range in Central India (21° 50'N, 73° 30'E), and comprise the highland area of the Satpura mountain range between the Tapti and the Narmada rivers. These forests fall into the tropical semi-evergreen and tropical moist deciduous types. The town of Rajpipla, which also was the capital of the former princely state, lies just beyond the northern edge of the Satpuras on the banks of the river Karjan (a tributary of the Narmada), a few kilometres before it meets the Narmada. This forest range once abounded in game and was particularly famous for its tigers. Many a celebrated guest of the Maharaja has bagged his tiger here. Today there are none or few tigers, which sometimes stray in from the nearby MP border. We saw a few barking deer, wild dogs, wild boar and observed tracks of hyena, jackal, leopard and sloth bear.

Though some areas of these forests have been opened up due to logging operations, they still support a large variety of birdlife. It has been observed that the void created by the clearing of forests and their subsequent

replacement by agricultural activities has created habitat more suitable for openland and grassland birds. There also are biotopes of semi-evergreen moist deciduous forests and ample forests of bamboo and it is in such patches that we observed some species of birds which have hitherto been unrecorded in Gujarat. More about this later. However, we noticed that in most areas, the forests are being severely depleted due to logging and it is only hoped that the planned sloth bear sanctuary in the Piplod area will be implemented. Our main idea of visiting these forests was to investigate the possibility of photographing various species of birds of prey and to record their nesting habits and behaviour. But as our observations and notes in the course of subsequent visits have revealed in these forests, the presence of several species of birds which do not appear to have been previously recorded north of the Tapti river, and some of these are additions to the Gujarat ornithology. Some of these birds are: *Hemicircus canente*, *Copsychus malabaricus*, *Zoothera citrina*, *Nectarinia zeylonica*, *Cuculus micropterus*, *Acridotheres fuscus*, *Myiophonus horsfieldii*, *Motacilla indica*, *Pycnonotus jocosus* and possibly *Nectarinia minima*.

The presence of some of these birds in the Rajpipla forests at the western end of the Satpura mountains, provides good evidence to

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the Satpura hypothesis explained by Dr. S. L. Hora. The Satpura hypothesis postulates that the Satpura-Vindhya trend of mountains, stretching across India, was once more elevated and moister than now, and with a more temperate climate. It was continuous with the Assam hills in the east and with the northern end of W. Ghats in the west, and thus served as a causeway for spread of specialized Himalayan flora and fauna to the S. Indian hills and to Sri Lanka.

We actually found over 50 species of birds breeding in the forests and in the surrounding areas. Many of these are new breeding records as several birds have not been previously found breeding in Gujarat and in the concerned area. SGM concentrated his efforts on making the checklist while RKN concentrated on the nesting behaviour of Raptors

We visited the Rajpipla forests on seven occasions during the last 21 months:

4th June to 14th June 1981	(RKN & SGM)
17th June to 5th July 1981	(RKN & SGM)
1st January to 6th January 1982	(RKN & SGM)
10th May to 12th June 1982	(RKN & Neil Soares)
19th July to 22nd July 1982	(Only SGM)
10th December to 13th December 1982	
	(SGM & Eric D'Cunha)
21st January to 24th January 1983	(RKN & SGM)

LITTLE CORMORANT (*Phalacrocorax niger*)

Occasionally seen on the Mozda river. On 21st July 1982, a solitary bird was seen carrying a twig and flying over the forest at Namgir towards Mozda. There certainly should be a breeding colony nearby. This cormorant is quite common on the Narmada river and also on the Karjan.

LITTLE GREEN HERON (*Ardeola striatus*)

Only once seen behind the mission at Dediapada on 21st July 1982. There was a solitary bird and close-by were a few Pond Herons.

POND HERON (*Ardeola grayii*)

Sometimes seen along the Mozda river, at times even inside the forest. On the evening of 10th December 1982, one of us (SGM) when walking along the Mozda river along with Eric D'Cunha, observed a huge eagle fly from the tamarisk vegetation on the riverbed. The eagle was carrying a Pond Heron in its talons and this it dropped in the water. This heron was a fresh kill and there was only a slit running from the throat downwards.

The Pond heron is common along the Narmada, around Rajpipla town etc.

CATTLE EGRET (*Bubulcus ibis*)

A common bird. Seen sometimes even in deep forest clearings and along forest streams. There is probably a breeding colony near Rajpipla town.

LARGE EGRET (*Egretta alba*)

The only place we saw *E. alba* was in the vicinity of Wadhvana tank near Dabhoi, about 25 kms. north of the Narmada river.

LITTLE EGRET (*Egretta garzetta*)

Whenever we have gone to these forests we have observed a solitary bird along the Mozda river. Right from behind the Mozda ashram to well past Piplod we have seen a solitary Little egret on the riverbed (a distance of about 6-7 kms.). This bird has a very peculiar way of procuring its food as it jumps and ballet-dances over the water and chases small fish. At times, however, there would be 3-4 little egrets on the riverbed. Observed on Karjan too.

NIGHT HERON (*Nycticorax nycticorax*)

On 21st July, 1982, three birds were seen a few kilometres from Dediapada. This is the

only occasion we have come across this heron here. However, we feel it should be more common in the surrounding countryside. We have seen it around Chandod near the Narmada and also in the neighbourhood of Dabhoi.

WHITE IBIS (*Threskiornis aethiopica*)

Sometimes a few birds would be present at the water's edge on the bank of the Narmada river, occasionally along with Black Ibises. We did not come across this ibis elsewhere.

BLACK IBIS (*Pseudibis papillosa*)

Seen in parties of 2-4 birds on the Narmada river.

BRAHMINY DUCK/RUDDY SHELDUCK
(*Tadorna ferruginea*)

Two birds were seen on 7th January 1982 on the Narmada river. Both were at the water's edge.

LESSER WHISTLING TEAL (*Dendrocygna javanica*)

Over a hundred of these teals were seen on the Rajpipla side of the Narmada river in June 1981. Between 3rd-11th June 1981, we saw these ducks almost everyday. They would be on the riverbank throughout the afternoons. Again on 5th July the same year, four of these ducks were observed on the river.

BLACKWINGED KITE (*Elanus caeruleus*)

During the years 1981-82, we observed this kite breeding in the compound of the PWD rest house (PWDRH) at Dediapada. The birds were seen copulating on 30th June 1981 and the following year we saw them mating on 21st July. While in 1981 June the pair was busy making its nest in two places on two

different trees (they were taking long thin twigs and placing them in both the trees and only in one of these trees was there any structure which appeared anything like a nest. It was rather similar to the nest of a crow). In 1982 the first clutch (eggs) of this kite was destroyed by human interference. During March-August 1983, RKN frequently observed this Kite in forests around Mozda and elsewhere.

CRESTED HONEY BUZZARD (*Pernis ptilorhynchus*)

In June 1981, a pair of these buzzards were observed making a nest (24th June) on a 'timru' (*Diospyros melanoxylon*) tree. The following year, a nest of this bird, with two eggs in it was found, again on a *timru* tree on 16th May. Rather unfortunately, due to reasons yet unknown to us, a few days later we found the eggs smashed and the shells were collected from the burnt ground below the nest-tree. The eggs were pale creamish in ground colour with blotches of dark brown.

COMMON PARIAH KITE (*Milvus migrans*)

Only on two occasions have we seen this bird flying anywhere around or over forest. It is hardly to be seen around Dediapada. Gets commoner as one moves towards Rajpipla town and is seen in good numbers around Chandod.

BRAHMINY KITE (*Haliastur indus*)

Seen on 22nd July 1982 on the Mozda river. The bird flew towards the forest. The only other occasion we ever saw this kite was near Chandod, not very far from the Narmada river.

INDIAN SHIKRA (*Accipiter badius*)

Common throughout the forests. In 1981, owing to our reaching the forests late in the season (17th June), most of the nests of this hawk were empty, the nestlings having flown away. Only one nest contained a full-fledged nestling on 25th June.

In the following May (1982), several nests of this hawk were seen and near one of these nests a hide for photography was built. This nest contained two downy nestlings and one addled egg which did not hatch and infact disappeared from the nest after a few days. The birds are very common, though less noisy during the cold season (December).

WHITE-EYED BUZZARD (*Butastur teesa*)

Twice seen around Dediapada in June 1982 and once around Chandod, north of the Narmada river. Several seen during a drive from Rajpipla town to Dediapada.

CRESTED HAWK EAGLE (*Spizaetus cirrhatus*)

There are two huge nests of thick twigs built on tall 'haldu' (*Adina cordifolia*) trees in forest. While at one of these nests we never observed any bird, at the other and also often in its vicinity we sometimes noticed *S. cirrhatus*. Our adivasi friend Banga informed us that these eagles had bred earlier in the year (finished by about April). The nest at which we had observed this eagle was found almost in shambles and completely broken in mid-December when one of us (SGM) had been to these forests. This condition of the nest was due to the cyclone in the first week of November, according to the adivasis.

BONELLI'S HAWK EAGLE (*Hieraetus fasciatus*)

We have seen this eagle flying over light

forest near Mozda, and settling on a dry teak tree-top. The multibanded tail with a dark subterminal broad band and the very pale underparts streaked on the body and lightly banded on the wings coupled with the absence of any crest were unmistakable.

EAGLE (*Aquila* sp.)

Only once have we seen a large dark brown eagle (unmistakably an *Aquila*) flying over forest.

INDIAN LONGBILLED VULTURE (*Gyps indicus*)

Seen in the Rajpipla town area once. However in mid-December SGM and Eric D'Cunha found this vulture fairly common around Mozda. An adivasi informed that these big birds (pointing towards the vultures) nest in rocks in a big hill in the forest. We wonder if some *G. indicus* also breed in the Rajpipla town area where a large number of *G. bengalensis* were nesting in December-January.

WHITEBACKED VULTURE (*Gyps bengalensis*)

Abundant in Rajpipla town and neighbourhood where on almost every large roadside tree one, two and even more occupied nests (with nestlings) were seen in December and January, 1981-82. Seen often around Dediapada, Mozda, and also flying over forest. Common also north of the Narmada river.

WHITE SCAVENGER VULTURE (*Neophron percnopterus*)

Sometimes seen in Rajpipla town and in the neighbourhood. Seen also at Dediapada and once along the Samot road in forest behind Mozda. One of us (RKN) saw it once at

Namgir in forest. SGM found it breeding in the first week of May near Baroda.

MARSH HARRIER (*Circus aeruginosus*)

A solitary bird seen near the PWDRH at Dediapada and once near Netrang in December 1982. A winter visitor.

CRESTED SERPENT EAGLE (*Spilornis cheela*)

Undoubtedly the commonest raptor in these forests. Its keeee...ke...kee calls are frequently and very commonly heard. As many as five nests of this eagle were found and checked in June-July 1981. Only two of these nests were occupied though a third nest located deep in the forest had an adult eagle sitting in it. This nest was however, found to be empty on checking. Out of the two occupied nests, one at Sankhdi contained a full-fledged eaglet while the other nest had a week-old eaglet when first checked on 18th June. This particular nest was photographed till 4th July and we presume the eaglet to have left its nest sometimes in the first or second week of August.

In 1982, a nest of this eagle was found in forest around Namgir (where RKN was camping) on 13th May. This nest was on a 'sadada' (*Terminalia tomentosa*) tree and it contained one egg when first checked on 13th May which hatched (presumably) on/around 17th May (Actually RKN first found a tiny eaglet on 20th May and we only presume it hatched around 17th May). A machan was built near this nest which was photographed till about mid-June. The eaglet at this nest left the nest on 20th July (SGM).

On 1st June another nest of this eagle, with a small eaglet in it, was found on a 'shishum' (*Dalbergia sisoo*) tree, in forest near Mozda by Bhanga & RKN. We observed that, especially around Namgir, the nests of *Spilornis*

cheela are not located very far from each other and that most of these nests were on *Terminalia tomentosa* trees. Further it was noticed that this eagle breeds somewhat later here as compared to other areas. Though in Vol. 4, of NIDIFICATION Stuart Baker writes of this race as breeding from Dec.-March in Travancore, Feb-March in Konkan, he also distinctly mentions that it breeds later (Feb-June) Northwards, i.e., Maharashtra, Gujarat etc., however, we found that in the Rajpipla forests the breeding season of *S. cheela melanotis*, in several cases examined, had extended well past July. In MP, this eagle breeds in March-May (Birdlife in Madhya Pradesh, C. E. Hewetson, JBNHS 53: 630). Thus we feel safe to state that the breeding season of *S. cheela melanotis* in the Rajpipla forests on the Satpura Range in South Gujarat is around mid-April-May to July-August.

KESTREL (*Falco tinnunculus*)

Seen at Dediapada once on 10th Dec. 1982.

PAINTED PARTRIDGE (*Francolinus pictus*)

SGM recalls having heard this partridge in scrub around Dumkhal.

JUNGLE BUSH QUAIL (*Perdica asiatica*)

On more than two occasions a small flock of quails flew off with a whirr from almost under our feet. The birds flew off from thick grass and landed on a forest path nearby and immediately moved into the surrounding grass cover. We also came across such small flocks of quails in forest around Juna-Rajpipla and around Piplod and Dumkhal. Except on one occasion we never quite managed to get a good glimpse of the quails in order to correctly identify them. Only once were *P. a. asiatica* observed very clearly for a brief period on a

forest path. The small party consisted of two males and five females.

RED SPURFOWL (*Galloperdix spadicea*)

Though we never saw these birds we recognized their calls on a couple of occasions. Some adivasis when shown pictures of this bird recalled having hunted this spurfowl occasionally.

RED JUNGLEFOWL (*Gallus gallus*)

On the morning of 22nd June, 1982, SGM saw this Junglefowl in deep forest a few kilometres behind Namgir. It was raining lightly. There were two females alongwith one male and they were observed from hardly about 60-75 feet away with binoculars. It was actually when some drab coloured ground birds crossed SGM's path that his attention was first drawn towards them. The birds moved into a somewhat open clearing and were immediately followed by a male Red Junglefowl. When SGM first saw the two females it was clearly noticed that they were appreciably different from the females of Grey junglefowl which SGM has often come across in the Borivli National Park in the neighbourhood of Bombay. These two females lacked the black and white markings of the *G. sonneratii* female. Hardly had the females been observed for a few seconds when a male Red junglefowl appeared into the open. Both the females and the solitary male disappeared into the forest soon. For some time the birds were preening and the drab females and the colourful male were close to each other. It is quite unlikely that these were domestic fowls, because the nearest adivasi hamlet was only Namgir (our camp-site) and the few domestic fowls that the adivasis keep would certainly not venture

so many kilometres deep into the forest for they normally keep to the adivasi huts. Moreover, SGM on later having a look at all the fowls of the advasis was convinced that it was not any of the domestic fowls that had strayed so far in the forest.

Incidentally, when SGM returned back to Bombay and checked Vol. 2 of HANDBOOK OF THE BIRDS OF INDIA AND PAKISTANS by Sálím Ali & S. D. Ripley, he was surprised to note that almost a hundred years ago the Red Junglefowl had been observed in the Rajpipla hills (exact area not mentioned) by Jerdon. Ripley in 'SYNOPSIS' mentions the occurrence of *G. g. murghi* in the Gujarat Satpuras.

GREY JUNGLEFOWL (*Gallus sonneratii*)

This bird is much persecuted by the local adivasis and it is only rarely that one can possibly see this junglefowl in the forest. In the course of six visits by us, we have managed to see this bird only twice. Even its calls are rather uncommonly heard. No evidence of breeding.

COMMON PEAFOWL (*Pavo cristatus*)

North of the Narmada river in the dry ravine countryside around the Narmada at Chandod the Peafowl is extremely common, and very tame too.

South of the Narmada it is for less common. In the forests it is less common still. Here we have more often heard it, particularly on rainy nights when the calls of this bird and those of *Cuculus micropterus* are frequently heard. We have only three actual sightings of the Peafowl in forest. An adivasi informed us of having found eggs of *P. cristatus* in heavy undergrowth in August.

Strangely, we noticed that the peahen is hunted by the adivasis while the cock is spared owing to religious sentiment.

WHITEBREASTED WATERHEN
(*Amaurornis phoenicurus*)

Common on the Mozda river, seen sometimes even along deep forest streams. Occasionally seen along the river on Samot road. Often around Dediapada, particularly in the neighbourhood of the PWDRH compound. Breeds during the rains. A nest found in July (21st) in a dense bush on the Mozda riverbed contained two eggs. Calls of this bird heard *ad nauseum*.

RED-WATTLED LAPWING (*Vanellus indicus*)

An adivasi reported a nest of this bird containing two eggs in May 1982. This was on the stony bed of a forest stream and when checked later both the eggs had been taken by someone. A few pairs of this lapwing are always to be seen on the stony bed of the Mozda river and of the other forest streams which are dry for most part of the year except during the rains. Occasionally this plover is seen on paths in thick forest too and it is one of the few openland birds that has settled in good numbers in forest clearings and in croplands right in the middle of deep forest. It is often seen around Dediapada and all around in the open wastelands and cultivated countryside.

It is however, around the Narmada river and north of this river that *V. indicus* happens to be a very common bird and here we found several nests in June. Most of these nests had clutches of four eggs each while one contained only three eggs.

GREY PLOVER (*Pluvialis squatarola*)

A bird of the seashore and marshes, naturally SGM was surprised when he saw this bird on the Mozda river (at Mozda) on 10th December 1982 when birding alongwith Eric

D'Cunha. The white upper tail and rump and a whitish wing bar, in flight the black axillaries on the wing underside, the greyish plumage and the typical plover beak were unmistakable.

LITTLE RINGED PLOVER (*Charadrius dubius*)

The two races, *C. d. jerdoni* and *C. d. curonnicus* are difficult to be distinguished in the field. A small flock of 11 birds was seen on a rainy morning (21st July 1982) on the Mozda riverbank. We found this plover common on the Narmada banks, on the sandy and stony shore of this river where the birds were breeding in May-June. A nest was found on 5th June. It contained one egg and two just hatched young birds. It was very hot in the afternoon when SGM found the nest and the adult birds were frequently going towards the water where they would wet their underside and come and sit over the egg and the young birds, certainly because of the intense heat (it was around 43°C.). The birds would wet their undersides every few minutes, by wading into shallow water and bobbing up and down to wet their lower body. We put up the machan about 2 feet from the nest and RKN photographed the birds for over two hours in the afternoon. The remaining egg did not hatch. The eggs and the young of this plover are almost impossible to locate among the stones from even as close as one foot distance even when the nest has been previously spotted. The young birds on leaving the nest sit tight in some depression or among stones, lying flat with their wings spread and are absolutely impossible to locate.

GREEN SANDPIPER (*Tringa ochropus*)

In December 1982, SGM found this sandpiper common in the area. Almost every stream

in forest had one or more of this sandpiper in its vicinity. This dark sandpiper with its almost squarecut white upper tail is a lovely sight on a forest stream as it flies rapidly from somewhere nearby on approach, with a sharp *tiu...tiueet...tiueet...* call. The bird is a winter visitor and we have come across it on the Narmada too.

WOOD OR SPOTTED SANDPIPER
(*Tringa glareola*)

This sandpiper can be readily distinguished from the preceding species by its paler upperparts and much paler underwing, and the white on upper tail, squarely cut from the brownish body. This sandpiper appears to be a less common winter visitor to the area. We have seen it only twice around Mozda river. Also seen on the Karjan, Narmada and also around Rajpipla town and behind the PWDRH at Dediapada.

COMMON SANDPIPER
(*Tringa hypoleucos*)

Seen near Dediapada in January 1982 and also on the Narmada river where we once came across a solitary bird in mid-June. Appears to be an uncommon winter visitor to the area. Seen also on Karjan in January 82.

LITTLE STINT (*Calidris minutus*)

A pair of these stints were seen on the Narmada in Jan. 1982. Not observed elsewhere.

BLACKWINGED STILT (*Himantopus himantopus*)

In June and July we have often come across small scattered parties of this bird on and around the Narmada river where we have observed the birds feeding on marshy ground around the river and at the water's edge. During these two months we noticed that there were quite a few immature birds too, thus

suggesting that the birds had finished breeding. They probably breed on the banks of the Narmada nearby. Seen also in December-January.

GREAT STONE PLOVER
(*Esacus magirostris*)

In June 1981, we always saw a pair of these plovers on the banks of the Narmada river on its south (Rajpipla) side. The adult birds were always accompanied by two smaller and paler birds which were immatures, thus indicating that the plovers breed early in the year, probably from mid-April to June. The adult birds, and also the immature birds spend most of the hot hours of the afternoons sitting tight among the stones on the riverbank. The birds hardly move and are very difficult to spot.

SMALL INDIAN PRATINCOLE
(*Glareola lactea*)

Surprisingly there is no mention of this bird for Gujarat by Salim Ali in 'Birds of Gujarat', (*JBNHS* 52; 2, 3 & 4).

On the banks of the Narmada river we found this pratincole abundant in June 1981. The birds were always very active, frequently dragging themselves on the sand and many a time they fooled SGM into believing that they were breeding. But the breeding season was certainly well past as was clear by the presence of so many immature birds which could be readily recognized by their dark spotted throat and breast and their upper body which had a kind of scaly appearance. But what were the adult birds doing by dragging themselves along and pushing one another, frequently uttering a very faint *chuk...chuk* calls or a *chirrr...rit...chrr...rrtt* as they would fly above for a short while? The birds always seemed to keep to the broad sandbanks of the Narmada river and it was clear that they quite disliked the

stony areas. We failed to come across any of these birds in winter when, however, we did not look very carefully on the several miles stretch of the river on either side as we had done previously.

WHISKERED TERN (*Chlidonias hybrida*)

Occasionally seen on the Narmada river. Seen also on the Karjan. Appears to be a winter visitor only.

INDIAN RIVER TERN (*Sterna aurantia*)

Comon on the Narmada river in June when the birds had evidently finished breeding. There were many immature birds too. The adult birds were still in their breeding plumage with their pitch black crown, forehead and nape. This along with their bright yellow long pointed beaks, the red legs and the deeply forked tail makes these terns a sheer treat for the eyes. The birds evidently breed on the banks of the Narmada river, on the sandbanks.

GREEN PIGEON (*Treron phoenicoptera*)

Though none of us actually saw this bird, Neil Soares who had come to the forests for a few weeks in May 1982, found a nest of this pigeon in the compound of the PWDRH at Dediapada. According to Neil the nest contained two full fledged nestlings on 23rd May. He showed the unoccupied and empty nest to SGM who did not find it to be the characteristically flimsy platform of a few twigs as has been described. This particular nest was quite a well constructed affair of thin, dry twigs and it was surprisingly well concealed in a thickly foliaged tree, about 8 feet high. It had a diameter of 10 cm.

BLUE ROCK PIGEON (*Columba livia*)

A few were seen at Piplod and also at Dumkhal in forest (about 20 and 27 kms. respectively

from Dediapada). At both these places there are grain storages. A few pairs of these pigeons were also seen on the bridge along Samot road where they were apparently nesting on the underside of the bridge along with a pair of *Hirundo concolor* in June and July 1982. *Columba livia* gets progressively common towards Dediapada and are present in appreciable numbers in Rajpipla town.

RUFOUS-TURTLE DOVE (*Streptopelia orientalis*)

In January 1983 a small party of these doves seen in forest along Karjan river. A pair was also seen near Namgir.

INDIAN RING DOVE (*Streptopelia decaocto*)

A few scattered flocks alongwith other doves seen between Rajpipla town and Dediapada in January 1983. Occasionally, seen around Chandod north of the river. The nearest that we found this bird breeding was at Dabhoi in July 1981. SGM has found it breeding in good numbers around Baroda in May, June and January.

RED TURTLE DOVE (*Streptopelia tranquebarica*)

Seen about 5km from Dediapada on a walk in dry and open countryside in June (exact date not recorded) 1982. This is the only occasion we have come across this dove south of Narmada. We also saw it north of the Narmada river and it appears that this dove distinctly prefers drier and thorny scrub covered country than other doves. Commoner north of Narmada.

SPOTTED DOVE (*Streptopelia chinensis*)

This happens to be the common dove of the area. Often seen along roads in open coun-

tryside as well as in forest. It also happens to be the only dove we found breeding in the forest. Nests with eggs were found near the ashram at Mozda and also in the neighbourhood of the PWDRH at Dediapada in June. The birds were probably breeding in December too, though no nest could be found.

LITTLE BROWN DOVE
(*Streptopelia senegalensis*)

South of the Narmada we have come across this dove in the dry and open country between the river and Rajpipla town and also around Karjan. North of the Narmada, SGM remembers finding a nest with one egg at Chandod which he feels belonged to this species one of which was calling nearby. The next day there was still one egg and it seems that the nest was deserted. We failed to come across this dove around Dediapada or around the forest.

LARGE INDIAN/ALEXANDRINE PARAKEET
(*Psittacula eupatria*)

Dumkhal, a small adivasi village in the forest (about 27km from Dediapada) is known for its large parakeets which breed in the surrounding forests early in the year. The birds may, however, be seen all along the forests in small noisy parties, at times even at Dediapada and even in Rajpipla town. Reportedly caught and sold for bird markets.

ROSERINGED PARAKEET (*Psittacula krameri*)

Often seen at Dediapada, Rajpipla town and elsewhere. Seen also in the forest at Mozda, Namgir, Piplod, and in the surrounding forests. At Chandod the birds were apparently breeding in June.

BLOSSOMHEADED PARAKEET
(*Psittacula cyanocephala*)

Often seen and heard in the forests as well as in the open outskirts of forest. A small flock was seen in the garden of a hotel in Rajpipla town. A fairly common bird.

PIED CRESTED CUCKOO
(*Clamator jacobinus*)

On 21st July 1982, SGM heard these cuckoos calling incessantly in the forest when walking along Samot road. The birds were then seen chasing each other and they were very active, apparently ready for breeding. The principal recorded host of this cuckoo and of *C. varius*, is the Jungle Babbler (*Turdoides striatus*), which SGM observed making a nest in the forest on the very same day.

COMMON HAWK-CUCKOO
(*Cuculus varius*)

Heard during the rains in forest. Not common.

INDIAN CUCKOO
(*Cuculus micropterus*)

There is no mention of this cuckoo for Gujarat in 'Birds of Gujarat' (*JBNHS* 52: 2, 3 & 4), by Sálím Ali. However on going through notes in the BNHS we found that there is one record of *C. m. micropterus* for Gujarat. This is a specimen collected by Ernest Shull in the Dangs forests, south of the Tapti river (*JBNHS* 59: 659). This bird was collected on 14th July 1954, and its ovaries were found enlarged, thus suggesting that the bird was in breeding condition and as such breeds in Gujarat for which there appears to be no further evidence of the breeding status of this cuckoo. We found *C. m. micropterus* fairly common in the Rajpipla forests north of the Tapti river where we frequently heard them in June and

July. The earliest that we heard the *bo-ko-ta-ko* call of this bird is sometime in the first week of June. This is also the period during which SGM found nests (with eggs or nestlings) of *Terpsiphone paradisi*, *Dicrurus paradiseus*, *Dicrurus adsimilis* and *D. caerulescens*, and also of *Oriolus xanthornus*. These are reported to be the chief birds in whose nests putative eggs of *C. micropterus* are claimed to have been found (HANDBOOK, Vol. 3, Salim Ali & Ripley S. D.) It thus appears that *C. micropterus* is a rains (breeding?) visitor to the area, though it may occur during the other times of the year as well when it remains silent and is thus difficult to see. Here it may be stated that in the Borivli National Park in the neighbourhood of Bombay SGM when birding along with Kiran Srivastav saw a solitary *C. micropterus* on 24th October 1982. Little is known as regards the breeding of this cuckoo. In NIDIFICATION, vol. 3, Stuart Baker writes, "no information has been recorded as regards breeding of *C. micropterus*, except a possible connection with drongos and with *T. paradisi*. Rev. F. S. Briggs found this bird fairly numerous in the neighbourhood of Mhow, about 200 kms. NE of Rajpipla, in the Vindhya hills where he recorded them only in June and July (JBNHS 35:395).

C. E. Hewetson (JBNHS 53: 627) in 'Bird-life in MP' presumes *C. micropterus* to be a migrant in MP, present from March in south MP and from May in north MP, upto July or August. But he also considers that since this cuckoo is silent for the rest of the year, one fails to spot it. Osmaston found *C. micropterus* rare at Pachmarhi on the Satpuras in MP where he occasionally heard it in April and May (JBNHS 28: 457).

INDIAN BANDED BAY CUCKOO
(*Cuculus sonneratii*)

Suspected seeing this species around Piplod in June.

KOEL (*Eudynamys scolopacea*)

Often seen and heard, though uncommonly, in forest, and also at Dediapada and in Rajpipla town.

SMALL GREENBILLED MALKOHA
(*Rhopodytes viridirostris*)

On 11th June 1982, SGM while bathing in the rivulet behind Namgir was attracted by a harsh call. On locating the call, a greyish longtailed bird the size of a sirkeer cuckoo, was seen on the branch of a nearby tree. On focussing the binoculars it was observed that the bird had a very prominent green beak and was promptly identified as *R. viridirostris*. The lower body was somewhat paler coloured and the region of the breast was lightly streaked with much paler. Moreover the long loose-looking tail was white-tipped and soon when the bird flew almost over SGM across into the forest, the white in the tail tips was very easy to see and very prominent too. S. D. Ripley in SYNOPSIS gives the range of this bird as peninsular India from Baroda (Gujarat), Maharashtra, Orissa and southwards to Kanyakumari.

In 'Birds of Gujarat' (Salim Ali JBNHS 52: 435), there is mention of a sight record of *R. viridirostris* from Ajwa in Gujarat.

SIRKEER CUCKOO (*Taccocua leschenaultii*)

Seen along the road leading from Mozda towards Namgir and also behind Namgir in forest. The bird prefers to remain in dense scrub and low bushes. It was also seen in bamboo forest along the Samot road. Near

Rajpipla town a solitary bird was seen once, while we also came across a solitary bird near river Karjan a few miles from Rajpipla town.

SGM found this cuckoo breeding near Channi, Baroda in June, 1979. The nest was a somewhat weak looking flat construction of dry twigs and it was lined with a sufficient amount of leaves, both dry as well as fresh. The nest contained two very pale creamish-white eggs on 10th June when it was first found. The Sirkeer cuckoo can be easily recognized by its long graduated white tipped tail, its more brownish plumage and a very prominent slightly yellowtipped bright red beak.

CROW PHEASANT OR COUCAL
(*Centropus sinensis*)

A common bird in the forests. Banga had found an occupied (with nestlings) nest in June. A bird was once seen carrying a lizard in its beak in late June. Seen also near Dediapada (near PWD compound and in the neighbourhood of the mission) and also in Rajpipla town. Seen also in the Juna-Rajpipla forests in January 1982. The birds are exceptionally noisy during the rains though they may also be heard throughout the year.

BARN OWL (*Tyto alba*)

The only occasion when we saw *T. alba* was on the afternoon of 10th June 1982. We were sitting in the PWD office at Dediapada when from almost overhead flew a very noisy procession of crows. They were mobbing and chasing a solitary Barn owl which settled in a large tree behind the ashram at Dediapada. Dediapada is teeming with several thousand Fruit Bats (*Pteropus giganteus*) and this particular tree was one of the many daytime roosts of these bats. Obviously the bats were greatly disturbed when the crows followed the owl

into the tree. The next few minutes were fascinating, the crows, fruit bats (also known as flying foxes) and the culprit of the drama the owl settled somewhere in the tree. After sometime the crows began to disperse and even the bats quietened down but we do not think if we saw the owl fly away. We were informed that *T. alba* is occasionally seen in Rajpipla town. The only other time we saw a barn owl was in June 1981 at Chandod, just north of the Narmada river.

GREAT HORNED OWL
(*Bubo bubo*)

We often saw three large owls (with ear tufts) in the forest along a stream where the birds would remain hidden in a densely foliated tree. Often due to our observing them during the day, these owls would fly away and then for the next few minutes they would be heavily mobbed by a great many avian denizens of the forest. While two of these large owls were identified as *B. b. bengalensis* (orange-yellow eyes and also the deep *huu...hoo* calls), the third owl appeared pale to us and we feel it was *B. c. coromandus* which SGM feels sure of having once heard during the night.

BROWN FISH OWL (*Bubo zeylonensis*)

Banga had informed us in the course of our first visit in June 1981 of a large owl which nested on the rock face along a forest rivulet. We saw this rather shabby nesting place where the owl had reportedly bred earlier in the year. The nest site was littered with crab shells and fish bones, evidently exposed from dried and old pellets. It was not until the 12th June 1982, that *B. zeylonensis* was first seen not far from this nest-site. According to Banga there existed another pair of these same owls upstream and which had another nest on a rock face.

BARRED JUNGLE OWLET
(*Glaucidium radiatum*)

Certainly the commonest owl in the forests. Its *koukuk...kookok...kukkuk...* calls can frequently be heard during the daytime too and they happen to be one of the most familiar bird calls in these forests. The calls extend for several seconds and at times end abruptly.

On 20th July 1982, an adult Barred Owllet was noticed feeding (probably a large insect) to a young owllet outside what appeared to be the nesthole. The young owllet was uttering a mewling call.

BROWN HAWK-OWL (*Ninox scutulata*)

RKN says that he saw, on quite a few occasions a pair of these owls in the huge trees along the path leading to Namgir. We failed to come across this owl elsewhere and we never heard its *uw...ook...* calls anywhere either.

SPOTTED OWLET (*Athene brama*)

Though not common in the forest, this owl is abundant just north of the Narmada, at Chandod. Here we saw almost 4-8 at times even more of these owllets on almost every tree in the area. Chandod is one of the most fascinating places for observing this owllet in great numbers.

We frequently heard this owllet in Rajpipla town, often in crowded localities. In the forests Banga informed us that a pair of these owllets had bred earlier in the year in a hollow of the same tree on which, though in another hollow, a pair of *Coracias benghalensis* had also finished breeding in May. There was yet another pair of these owllets which, SGM feels were breeding in a tree in the compound of the PWDRH at Dediapada.

MOTTLED WOOD OWL (*Strix ocellata*)

First recorded when we heard these wierd

chuu...huwha calls on successive nights at Namgir at around dusk and again during the night. It was only on 12th June that we first encountered *S. ocellata* deep in the forest, a few kilometers from Namgir. The dark eyes and the large head without the tufts was unmistakable. The owls were vocal in the late evening when we were observing them and these calls were identical to the ones we had heard the nights before. For atleast twenty minutes we watched the owls till it got quite dark and we had to return to Namgir.

NIGHTJAR

In a small scrub and dry grass covered hillock just on the southern banks (i.e. Rajpipla side) of the Narmada river, SGM often flushed a solitary Nightjar in the first two weeks of June 1981. The bird on flying from almost under his feet would settle further in the grass or on a flat rock from where it would crawl and remain in the fallen leaves. We never heard it call and could not identify it.

We failed to come across any nightjar in or around the forests. This is surprising since we never heard any either. But according to adivasis these birds are often flushed by them.

ALPINE SWIFT (*Apus melba*)

SGM has seen this bird around Daman Mahal, flying about around the cliffs. Not seen anywhere else.

HOUSE SWIFT (*Apus affinis*)

Seen at Netrang, Rajpipla town (sometimes large gatherings near the red clock-tower and often around the old houses) and also near Dediapada. Evidently breeding in May-June in Rajpipla town. Observed also at Chandod.

CRESTED TREE SWIFT
(*Hemiprocne longipennis*)

RKN first saw this bird when photographing *S. cheela* from the hide in June 1982. On a later day SGM too saw this swift in more or less the same position as described by RKN. The solitary swift was perched as though it was incubating its single egg. But it was not there on any later day and there was certainly no nest.

LESSER PIED KINGFISHER (*Ceryle rudis*)

In January 1982, we saw a pair of these kingfishers on the Karjan river in the Juna-Rajpipla area. On the Narmada river this bird is not uncommon and on some days we saw as many as five of these kingfishers together, uttering their pleasant twittering calls as they fly. They are spectacular birds to watch, especially when they hover about twenty odd feet above water and dive into the water at an astonishing speed.

In July 1982 a solitary bird was seen near Dediapada near the mission.

SMALL or COMMON KINGFISHER
(*Alcedo atthis*)

A pair of these kingfishers were evidently breeding in a mudwall along the Mozda river as they were observed to leave a tunnel hole on several occasions. This kingfisher is often seen on forest streams but it is uncommon in the area. Seen also on the Karjan in the Juna-Rajpipla forests and in the vicinity of Rajpipla town and on the Narmada.

STORKBILLED KINGFISHER
(*Pelargopsis capensis*)

Surprisingly we never saw this kingfisher which is supposed to be not uncommon in the forests here. But SGM feels that the loud *ke..kekeke..* call that can be sometimes heard in the forest could be of this bird.

WHITEBREASTED KINGFISHER
(*Halcyon smyrnensis*)

Common. A nest with one egg was found in mid-May 1982 in a mudwall in forest, quite some distance from any forest stream. There was yet another nest-tunnel in a mudwall deep in the forest and this apparently contained nestlings since the adult birds were observed taking insects into the tunnel which on checking was found to be atleast three feet deep. This bird is seen almost along every stream in forest. Also seen in Dediapada and Rajpipla towns.

Found breeding at Chandod, just north of the Narmada where we found one nest which was a very open affair. It was almost a depression in a natural cavity on the ground, almost like a lark's nest and it contained four glossy white eggs. The incubating bird could be seen right in the open. Unfortunately this nest and the eggs in it were found destroyed just a few days later (mid-June 1981).

CHESTNUTHEADED BEE-EATER
(*Merops leschenaulti*)

This bee-eater is found only from Ratnagiri southwards, and also from Dehra-Dun east to Bhutan, Arunachal Pradesh, Assam and in the Eastern Ghats. We came across a pair on the southern side of the Narmada river on 5th June 1981. A note regarding this sighting, the northernmost in Western India is in *JBNHS* 79: 669-70.

This bird is not included in Sálím Ali's notes on 'Birds of Gujarat'.

GREEN BEE-EATER (*Merops orientalis*)

Sometimes seen in the outskirts of forest. Not common. However, it is abundant north of the Narmada, at Chandod and elsewhere where large numbers of this bee-eater were

breeding in June 1981. Seen also near and in Rajpipla town (where breeding in June) and on the Karjan river.

INDIAN ROLLER (*Coracias benghalensis*)

This bird is not mentioned for the area by Sálím Ali in 'Birds of Gujarat' *JBNHS* 52: 447), or, rather, no specimen has been collected in this area.

We found this bird not at all uncommon in the forest. Infact the noisy nature of this bird makes its calls one of the very familiar bird calls of these forests. There is always a bird or two nearby, if not calling harshly, then quietly perched on some dry branch from where it suddenly flies with a flash of its bright colours.

At one nesthole, the adult bird was observed feeding a young just outside on the branch in mid-June. A pair had finished breeding, according to Banga, in a cavity in the very same tree on the path leading to Namgir in forest which had also housed a pair of *Athene brama*. The nesting season of this bird appears to range between mid-March to June, July. We also saw *C. benghalensis* at Dediapada, and also near Rajpipla town where a pair was evidently breeding on a tree in the palace grounds in June 1981.

HOOPOE (*Upupa epops*)

We saw the Hoopoe only in January around the mission and the PWDRH at Dediapada. In June however, we have once seen a pair a few kilometres from Chandod. No information as regards breeding.

GREY HORNBILL (*Tockus birostris*)

The only time we have come across this bird is a pair seen by SGM and Neil Soares on 12th June 1982, several kilometres from Namgir inside the forest. We doubt if we ever heard

the shrill squeals of this hornbill in these forests where it appears to be a uncommon bird.

LARGE GREEN BARBET (*Megalaima zeylanica*)

Though not so common, nevertheless the calls of this bird can be heard throughout the day. The *pukruk, pukruk* calls can never be mistaken if once heard and they are one of the most familiar bird calls in our forests. A bird was flushed from within a nesthole in June 1982. It returned into the hole soon after. S. D. Ripley in SYNOPSIS gives the range of *M. viridis* (785) as the Western Ghats, from the Narmada river south through Kerala. This bird can be distinguished from *M. zeylanica* only by its white cheek stripe. But since these birds are rather difficult to locate in the forest we never quite managed to get a good look at the head of one.

Sálím Ali failed to come across *M. viridis* anywhere else in Gujarat except in the Surat Dangs forests south of the Tapti river. In HANDBOOK vol. 4, by Sálím Ali & S. D. Ripley the range of *M. viridis* is given as Kerala north to Narmada river.

CRIMSONBREASTED BARBET/COPPERSMITH (*Megalaima haemacephala*)

This bird may be sometimes heard and seen in forest. It seems to have penetrated into the forest and we found it at Mozda, Namgir, Pip-lod and elsewhere too. Seen only occasionally around Dediapada where it is not common. We also found it in Rajpipla town at Chandod, north of the Narmada river we found young birds just out of the nesthole in the first week of June. The young birds lack the crimson. They have more greenish upperparts and head and pale yellowish belly region and throat, the former lightly streaked. We saw them being fed outside the nest.

GOLDENBACKED WOODPECKER (*Dinopium benghalense*)

Often seen, at times along the road from Dediapada to Mozda. Quite common and vocal in the forest. At Namgir a bird was flushed from its nesthole on 10th June. It was twice again flushed from the same hole and it appears that it was breeding. Neil Soares found a pair breeding in mid-May at Dediapada.

YELLOWFRONTED PIED/MAHRATTA WOODPECKER (*Picoides mahrattensis*)

A pair of these woodpeckers was seen often entering their nesthole in a 'Haldu' (*Adina cordifolia*) tree on 10th June 1982.

Seen also at Dediapada in the compound of the PWDRH. Found breeding north of the Narmada at Chandod, where we found three nestlings just out of the nest in mid-June 1981.

PYGMY WOODPECKER (*Picoides nanus*)

This tiny woodpecker, because of its small size and its somewhat secretive habits is a rather difficult bird to encounter in the forest. It certainly is one of the most hard-to-see birds. We have seen solitary birds only thrice. The birds keep to thin branches where they move about around the branch, not very high up. We saw this woodpecker at Piplod, along the Samot road and once on the eagle-nest tree near Namgir.

HEARTSPOTTED WOODPECKER (*Hemicircus canente*)

Our sighting of this bird north of the Tapti river in the Rajjipla forests on the Gujarat Satpuras extends the range of this woodpecker northwards by about 60 km, the previous northernmost point of this bird's distribution being Sonagadh in Navsari district, in the

Dangs forests. In forest behind Namgir, we saw a pair of *H. canente* for three consecutive days after which they disappeared and we never came across them anywhere else.

Ripley, S. D. in SYNOPSIS mentions about a probable extension of *H. c. canente* into the Gujarat Satpuras.

BLACKBACKED WOODPECKER (*Chrysocolaptes festivus*)

We first saw this bird when Banga showed us a nesthole and not far was this woodpecker. There was a pair in the neighbourhood. We saw this woodpecker again near the ashram at Mozda. No signs of breeding.

INDIAN PITTA (*Pitta brachyura*)

We have occasionally seen this bird in forest, the last sighting being on 10th December 1982 when we saw a solitary bird. Neil Soares saw this bird several times in May 1982. At Chandod, just north of the Narmada, we found this bird building a nest in July.

Ernest Shull considers *P. b. brachyura* as breeding in the Dangs forests south of the Tapti (*JBNHS* 59:659).

We saw a solitary bird on 10th Dec., 1982 (SGM & Eric D'Cunha). However, Sálím Ali (*JBNHS* 52: 454) failed to come across *P. b. brachyura* during his Gujarat survey between August and mid-April. There distinctly appears to be some seasonal and local movements of *P. brachyura*.

BLACKBELLIED FINCH LARK (*Eremopterix grisea*)

Sometimes seen in small flocks around Dediapada and also on the outskirts of Rajjipla town where we also saw a small party in the palace grounds.

In the first two weeks of June 1981, there were hundreds and hundreds of this bird on

the stony banks of the Narmada river, a few kilometres from Chandod. This was just before the commencement of the monsoon and it appears that there are local movements of *E. grisea*, resulting in the sudden appearance of large numbers of this lark in certain areas on some days and almost a complete absence a few days later. Here, on the banks of the Narmada we observed that the larks would always prefer to remain in the shade of stones and would fly only when almost trampled upon. There was no signs of their breeding either in June (when they were abundant) nor in December-January. SGM found this lark breeding in mid-June in the neighbourhood of Baroda and in October, December, March and April in and around Bombay. Even around Bombay SGM feels that there are great local movements of this lark and that normally very few of these larks are observed when they have been found breeding.

RUFOUTAILED FINCH LARK
(*Ammomanes phoenicurus*)

Occasionally seen around Dediapada and rarely on the Mozda riverbed. Common on the banks of the Narmada river though a small flock was noticed on the Karjan banks in the vicinity of Rajpipla town. The birds were breeding on the Narmada, as was apparent by their carrying food in their beaks. However, no actual nest was found.

EASTERN SKYLARK (*Alauda gulgula*)

Around Chandod, a few pairs of this lark were in song and it is possible that breeding was in progress in the neighbourhood. Not seen or heard elsewhere though it should occur in the vast open areas around Rajpipla town.

MALABAR CRESTED LARK (*Galerida malabarica*)

Around Chandod SGM has sometimes seen

a solitary crested lark. It appears to be an uncommon bird in this area while around Rajpipla we altogether failed to come across any.

PLAIN SAND MARTIN (*Riparia paludicola*)

We feel (unfortunately we failed to confirm) that the good numbers of Martins flying about a huge mudwall immediately on the banks of the Narmada were Sand martins. The birds were evidently nesting on this mud-wall on the Narmada, at Chandod.

DUSKY CRAG MARTIN (*Hirundo concolor*)

In June 1982, a pair of these martins were observed collecting wet mud from a roadside puddle near Mozda. On 22nd July a pair was busy in the construction of their nest on the underside of the bridge on the river along Samot road (about 1 km from Mozda). The pair were bringing in wet mud once every 10-15 minutes and the nest appeared to be almost fully built on that day. The nest is a lovely half-cup of mud and it was stuck to the perpendicular surface of the bridge wall, in an inaccessible position. The row of white spots at the tip of the tail of the martins was clearly visible as SGM was observing the martins from above as they would go to their nest under the bride. We also came across this martin at Chandod.

EASTERN SWALLOW (*Hirundo rustica*)

Seen in December and January around Dediapada, Netrang, Rajpipla town environs and also around the Narmada.

WIRETAILED SWALLOW
(*Hirundo smithii*)

In June 1982 we noticed a small flock of about 8-10 birds flying along a small stream at Dediapada. Not seen elsewhere.

STRIATED (REDRUMPED) SWALLOW
(*Hirundo daurica nipalensis*)

This, the migratory race of *H. daurica* is seen in very large flocks in winter. It also has a much paler rump than *H. d. erythroptgia* which is the resident race here.

An enormous flock of swallows seen on the telegraph wires between Dediapada and Netrang in December 1982 was of this species. This particular flock occupied atleast a hundred metres of wire length and the birds would frequently launch aerial sallies.

STRIATED (REDRUMPED) SWALLOW
(*Hirundo daurica erythroptgia*)

Seen normally in small flocks or in twos and threes. We came across it near rock-faces upon Daman-mahal mountain (supposed to be the highest mountain in the area, being over 3000 ft. above m.s.l.) and once around a rocky riverbed near Namgir in forest.

Seen also near Dediapada, Rajpipla town and at Chandod where breeding was in progress in June.

BAYBACKED SHRIKE (*Lanius vittatus*)

Seen a few kilometres north of Chandod (North of Narmada river) in June when SGM feels that the birds (there was a pair) were breeding in the neighbourhood.

RUFOSBACKED SHRIKE (*Lanius schach*)

Just north of the Narmada river we found atleast six nests of *L. schach*. The nests were found in July 1981. The nest of this bird is a massive looking cup, built of a great many materials and at times it even contains wool, rags and feathers. It is normally very well concealed in the fork of a thickly foliated branch of a mango or a tamarind tree. Two of the nests we found were on thorny trees.

All these nests were between 8-15 feet from the ground though one of them was much higher on a *Magnifera indica*. Only one of the nests had three eggs while the remaining contained five eggs each. The eggs are whitish or very pale pink, spotted with reddish brown and purple.

We feel that the birds which we found breeding north of the Narmada, at Chandod and Dabhoi should be *L. s. erythronotus* (i.e., The Rufousbacked Shrike). Atleast at three of these nests, the adult birds had much more rufous, distinctly somewhat brighter and also extending to the back, though not very easily observable. Salim Ali in 'Birds of Gujarat' (*JBNHS* 52:781-82) has considered the Grey-backed shrike (*L. s. caniceps*) in which he states, the rufous is more or less confined to the rump, though he also mentions that there is a regular cline and in a great many cases (especially in winter), it is exceedingly difficult to assure oneself of the correct racial identity of individual specimens. Salim Ali regards *L. s. erythronotus* as a winter visitor to Gujarat, and the breeding birds, though clearly intermediate, are closer to and would readily pass for *caniceps*. This intermediate population was named by Koelz as *L. s. kathiawarensis* (now considered as *caniceps*, by S. D. Ripley in SYNOPSIS). We ourselves went through all the specimens in the BNHS collection, and we feel that there is not much to sufficiently differentiate *erythronotus* and *caniceps* in the field. Moreover, Capt. Butler *Stray Feathers*, iii: 463—1875) has considered *erythronotus* as the breeding (resident) race.

We occasionally came across this shrike south of the Narmada but we did not look for any nests here. In December and January we saw these shrikes around Rajpipla town and also in the vicinity of Dediapada, near the PWDRH and elsewhere.

GOLDEN ORIOLE (*Oriolus oriolus kundoo*)

Presumed to be a winter visitor to the area by Sálím Ali (*JBNHS* 52: 797). We however found this bird to be common and resident in Gujarat. SGM has found this oriole breeding in appreciable numbers around Baroda.

Just north of the Narmada river, at Chandod, we found good numbers of nests of *O. o. kundoo*. In June-July 1981, we found several occupied nests of this bird. All of these had eggs and incubation was in progress. One of these nests was exceptionally low down, it being only about 8 feet from the ground on a tamarind tree, and SGM could touch the eggs (there were two) even when standing on the ground.

We saw this oriole occasionally south of the Narmada, at Dediapada and in and around Rajpipla town where this bird was certainly breeding in May-June. Noted also in the Juna-Rajpipla forests in January. We however, failed to come across the Golden oriole around Mozda or elsewhere in the forests.

BLACKHEADED ORIOLE
(*Oriolus xanthornus*)

Common in the forests. We never saw this bird anywhere around Dediapada though in January we observed it in Rajpipla town. Good numbers of this oriole were seen in the Juna-Rajpipla forests in January 1982. Breeding was in progress in June-July. We found two nests. One of these, found on 13th June 1982 contained two eggs while another containing three tiny nestlings was found in July 1982. Both these nests were well concealed in large leafy trees and while the former was only about 14-15 feet from the ground, the other was much higher.

BLACK DRONGO (*Dicrurus adsimilis*)

Very common around Rajpipla town, parti-

cularly in the open countryside and along the highways, where large numbers are always seen on overhead telegraph wires. Becomes progressively less common as one moves towards Dediapada and lesser still towards Mozda and the forests. Seen however in forest at Piplod (about 23 km from Dediapada) where a pair had a nest (evidently with eggs) in mid-June.

Nests were found in the vicinity of Rajpipla town in June, at Chandod where nest construction was in progress in July, and also near the PWDRH at Dediapada (with 3 eggs in last week of June), and one on way to Mozda on a teak (*Tectona grandis*) tree. All these nests contained two or three eggs while the nest in the PWDRH compound at Dediapada contained three tiny nestlings when next checked on 30th June 1981.

ASHY OR GREY DRONGO
(*Dicrurus leucophaeus*)

SGM and Eric D'Cunha saw this bird on 11th December, 1982. We found this bird present in good numbers in mid-Jan. 1983.

WHITEBELLIED DRONGO
(*Dicrurus caerulescens*)

Not uncommon in the forests. We saw it at Mozda, along Samot road, at Namgir, Piplod, Dumkhal, Juna-Rajpipla and elsewhere. A pair was calling incessantly in the compounds of the PWDRH at Dediapada on 13th June, 1982. Nests with eggs were found at Piplod and Namgir. In all we located four nests of *D. caerulescens*, three of them at Namgir and one at Piplod. Three eggs seems to be the normal clutch and the eggs are not much different from those of *D. adsimilis*. The nests of *D. caerulescens* do not appear to be so well concealed and all the nests found by us were between 12-25 feet from the ground, in the fork

of an outlying branch, almost all of these along a forest path.

GREATER RACKET-TAILED DRONGO
(*Dicrurus paradiseus*)

A common and familiar bird of these forests, sometimes a few birds wander outside the forests and may be seen on roadside trees at Mozda, though we came across a small party of four birds at Moti-Singloti, several kilometres from Mozda towards Dediapada. Very common in the forest around Namgir where we were camping and seen almost everywhere in forest almost all the way upto Daman-mahal. One can never miss the much-varied and often confusing calls of this bird. Breeding was well under progress in June-July when we located five occupied nests, containing either eggs or nestlings. All these nests were very high on trees and two of them were on teak (*Tectona grandis*) trees. At two of the nests we observed that one of the incubating birds lacked both the tail streamers and appeared almost like a Black Drongo. At another nest both the adult birds had only one streamer each while at a fourth nest only one of the adult birds lacked a streamer. Only at one of the nests did the adult birds have both their streamers intact.

GREYHEADED MYNA (*Sturnus malabaricus*)

Sálim Ali altogether failed to come across this bird in Gujarat and this bird is not included in 'Birds of Gujarat' (*JBNHS* 52, Nos. 2, 3 & 4). We ourselves never saw this bird anywhere around Rajpipla but in December 1981 we noticed a flock of about thirty of these mynas near Timba, about 75 km north of Baroda. SGM has also seen this bird in the neighbourhood of Baroda where he feels a

pair was breeding in a hole in a Jambool (*Syzygium cumini*) tree in June.

Himmatsinhji saw this bird in Kutch (Mandvi) in December 1969 and he also noticed a pair of these mynas busy carrying nesting materials in a hole in a casuarina tree at Wankaner in July 1967 (*JBNHS* 67:332-33). Capt. Butler found this bird common at Mt. Abu in the hot weather when he saw it in considerable flocks. He failed to observe this myna in the plains (*Stray Feathers* iii: 494-95).

BLACKHEADED OR BRAHMINY MYNA
(*Sturnus pagodarum*)

Breeding in good enough numbers just north of the Narmada at Chandod where we found nests with eggs in June and July. Observed also in Rajpipla town (probably breeding) and also around Dediapada. We found this myna to be less common south of the Narmada towards Rajpipla.

ROSY PASTOR (*Sturnus roseus*)

Observed in January in Rajpipla town and also near Juna-Rajpipla. Seen in considerable flocks at Timba in December 1981. In December 1982, a few pastors were noticed near Mozda. Appears to be a rather common winter visitor.

PIED MYNA (*Sturnus contra*)

This bird does not deserve mention in this list. But since SGM has noticed a pair of these mynas at Valsad in November 1981, and since this bird has never previously been recorded in Gujarat we therefore include it. The Pied Myna is basically a bird of northern and eastern India, not ordinarily found west of Hyderabad in Deccan or south of Masulipatam. It is possible that this bird may have been an escaped cage-bird.

COMMON MYNA (*Acridotheres tristis*)

Though a common in the towns, we often saw this bird in the forests too. The birds were evidently breeding during May-July when they were very noisy and were seen entering holes in walls and trees. We however, never checked any nest either in the forests or around Rajpipla town but found nests with eggs in July at Chandod and SGM obtained eggs in May near Baroda. Four or five glossy pale blue eggs form the normal clutch. On the underside of a road bridge in Rajpipla town, large numbers of *A. ginginianus* along with *A. tristis* were certainly breeding in the many holes in the bridge walls in June.

BANK MYNA (*Acridotheres ginginianus*)

Breeding in abundance in the mudwalls of the many ravine-like formations in the immediate vicinity of Narmada river, around Chandod. Dozens and dozens of these mynas would fly from these mudwalls which appeared almost lifeless at first sight. But in these often inaccessible mudwalls there are countless holes (tunnels) of varying length, each of them having a haphazardly constructed cuplike mass of grasses and feathers inside and these contained eggs in mid-June. SGM on checking these nesting colonies found that some of these nests which had separate entrance holes were actually continuous inside. We are still surprised as to how, on somebody's approach, do all the birds from a widespread colony leave their nests together? How do these birds communicate at some approaching disturbance which pulls them all out of their nest holes at the same time? SGM similarly checked a large crowded colony of Little Green Bee-eaters breeding just a few kilometres north of Baroda and even here he observed that if he as much

as approached the nesting colony very close, all the bee-eaters would immediately leave their nest holes and while some of them would circle overhead uttering their twittering notes, most of them would perch silently on the wires overhead and return back to their nest-tunnels as soon as the disturbance had ceased. At the nesting colonies of the Bank Mynas we however noticed that on our approach a few birds which would be outside would utter a harsh note and we feel that perhaps this harsh note of these outside birds is some kind of a warning call for the other birds inside their tunnels which at times are over four to five feet long. Probably at such nesting colonies where a large numbers of birds breed in close proximity, there are a few watch-birds whose harsh calls apparently serve as a warning signal for the other birds inside their nests.

JUNGLE MYNA (*Acridotheres fuscus*)

When observing *Spilornis cheela* at its nest from the hide, SGM noticed a Common-Myna like bird settle on the very tree, about ten feet from the hide. This bird lacked the yellow around its eyes and moreover it had a darker (somewhat greyish-black) and not yellow iris. Also, the ill-formed tuft of feathers on the head was very prominent. RKN too says that he noticed this myna from the hide when photographing *S. cheela*. There is no mention of this bird in 'Birds of Gujarat' (JBNHS 52), Sálím Ali having failed to find this myna in Gujarat.

S. D. Ripley in SYNOPSIS gives the range of this race as Peninsular India, chiefly on the western side, from Gujarat, including the Kathiawar peninsula, southwards through western Maharashtra to Kerala and Tamil Nadu.

INDIAN TREE PIE (*Dendrocitta vagabunda*)

Common in the forests. Breeding evidently

over earlier in the year, probably by mid-May, though near one nest the parents were observed feeding two fledglings on 10th June. One of the common birds here, the tree-pie was never seen outside the forests and only once have we noticed a pair of these birds along the road at Bal, about a kilometre from Mozda.

HOUSE CROW (*Corvus splendens*)

Common in Rajpipla town and at Dediapada and in all the nearby towns. Almost absent around Mozda and further into the forests where *C. macrorhynchos* is more common. Some *C. splendens* may be however, seen at Mozda and even around Piplod and Dumkhal, and also once around Juna-Rajpipla. Nest-building observed in Rajpipla town in June-July when at a few roadside nests incubation was in progress.

JUNGLE CROW (*Corvus macrorhynchos*)

From Dediapada onwards towards Mozda and in the forests this is the crow that one is more likely to encounter. The House Crow is almost absent in the forests except for an occasional bird. At only one nest did we observe *C. macrorhynchos* in Dediapada town in June, 1981. It appears that this nest contained nestlings in June which is well past the recorded breeding season of this crow which normally nests early in the year.

COMMON WOOD SHRIKE (*Tephrodornis pondicerianus*)

Sometimes seen and heard in the light forest and scrub around Mozda. We also saw this bird in several other areas in the forests and also in bamboo forest along Samot road. This small shrike distinctly appears to prefer light open forest than thick forest. We also observed this bird around the PWDRH and the mission at Dediapada and on the outskirts of

Rajpipla town we once saw three birds. No signs of any breeding activity in May or June, the birds probably having nested earlier in the year. However, SGM found this shrike breeding in the first week of June on the outskirts of Baroda when he found a nest with two almost full-fledged young birds in it.

LARGE CUCKOO SHRIKE (*Coracina novaehollandiae*)

Sometimes seen in the forests. In June and July we noticed that over half dozen of these birds would roost every night in a large 'Haldu' (*Adina cordifolia*) tree hardly 200 metres from our camp-hut in Namgir. Every evening at around 6-30 p.m. the birds would arrive and for the next half an hour or so till it was quite dark, the birds would be chasing one another, frequently uttering their pleasant musical notes. SGM is sure that he saw this bird several times passing some food (an insect) to another bird, probably its mate. He feels that what he saw was some pair-formation activity and that the breeding season of this bird was approaching.

LITTLE MINIVET (*Pericrocotus cinnamomeus*)

A well distributed bird in these forests. It is also the only minivet we came across in the Rajpipla area. Seen almost throughout the forests and also around the PWDRH at Dediapada and in the neighbourhood of Rajpipla town. We also saw unusually large congregations of this bird in January in the forest around Juna-Rajpipla.

In mid-June 1982, when walking along the road leading towards Namgir, SGM often observed this bird fly from a particular tree whenever he would pass under it. Careful searching for the next couple of days resulted in his locating the tiny nest, remarkably conceal-

ed on the upper surface of a tiny fork, just jutting out of the main stem, about 25 feet from the ground. In fact, had it not been for the apparent uneasiness of the birds on being observed from below, it would have been rather difficult to spot the nest. When the female settled in the nest, her tail could be seen just protruding enough to be quite clearly noticed. There were certainly eggs in the nest and incubation was in progress, but since it had been raining for the past few days and the tree-trunk being wet and slippery, we could not risk anyone climbing up to have a look at the nest.

COMMON IORA (*Aegithina tiphia*)

A common bird throughout the forests, seen also at Dediapada and in Rajpipla town and also often around Chandod where it was observed breeding in July.

In the forests we found two nests of this bird. From one of these the young had apparently flown away in mid-June while the other contained two nestlings on 13th June. North of the Narmada *A. tiphia* was noticed building a nest in July. Around Bombay SGM has found nests with eggs in May, August and also in the third week of September. Probably *A. tiphia* breeds twice in a year.

GOLDMANTLED CHLOROPSIS
(*Chloropsis cochinchinensis*)

Quite common in the forests. This bird is a fantastic mimic and we heard it reproduce to perfection the calls of *D. adsimilis*, *D. caerulescens*, *O. sutorius*, and to a lesser extent the calls of *P. jocosus*, *A. badius*, *Pomatohinus horsfieldii* and also the harsh chew call of *T. paradisi*. We first observed this bird's amazing proficiency at mimicry at Piplod on our very first day in these forests on 18th June 1981. A pair of these chloropsis were mimi-

cking and frequently chasing drongos (*D. adsimilis* and *D. caerulescens*), tree-pies, common mynas and also parakeets from a large tree where the pair was almost always present. On observing this highly demonstrative behaviour of the pair, we strongly suspected the presence of a nest there and surely enough there was one in the fork of a very thin out-hanging branch, almost 25-30 feet up in the tree. On 19th June, a bird was sitting inside the nest (probably incubating). The nest is a cup of grasses, fibres etc., and is quite like the nest of *P. cafer*, though we feel not quite as deep as that of the latter.

On 1st July morning a chloropsis was seen carrying food in its beak in forest near Namgir.

REDWHISKERED BULBUL
(*Pycnonotus jocosus* spp?)

In SYNOPSIS... by S. D. Ripley, there is no mention of the presence of any race of this bulbul in the Rajpipla area between the Tapti and Narmada rivers. Sálím Ali during his Gujarat Ornithological survey (Birds of Gujarat — *JBNHS* 52:744) observed only a single pair at Waghai south of the Tapti in the Surat Dangs. He failed to meet this bulbul elsewhere in Gujarat, Saurashtra or Kutch.

We found *P. jocosus* present in appreciably good numbers north of the Tapti river in the Rajpipla area. Infact we once saw this bird at Dediapada too. In the forests SGM found a nest of this bird in a small bush on 10th June when it contained two nestlings. This was quite close to the nest of *S. cheela* which was photographed.

The occurrence of *P. jocosus* is discontinuous in Central India (C. E. Hewetson, in 'Bird Life in MP *JBNHS* 53: 606). Also, there is no mention of this bulbul for Mhow (Rev. F. S. Briggs *JBNHS* 35). However, at Pach-

marhi in the MP Satpuras, B. B. Osmaston found this bulbul common in the ravines around Pachmarhi where he found them breeding in April-July (*JBNHS* 28:454).

REDVENTED BULBUL (*Pycnonotus cafer*)

Common everywhere. Several nests with eggs were found in May-July. Only one nest at Mozda contained full fledged nestlings on 13th June.

WHITEBROWED BULBUL
(*Pycnonotus luteolus*)

Though the rambling calls suddenly burst from dense undergrowth almost anywhere in forest, the birds themselves are only rarely seen. We saw this bulbul only at Mozda and twice along the Samot road, and once in Rajpipla town.

At Chandod, just north of the Narmada this bulbul was found breeding in June and July when we found two nests. One of these had two eggs while the other contained two nestlings which, after a few days, had come out of the nest and we could often see the parents feeding these young birds on nearby trees. Though the nest of *P. luteolus* is rather similar to that of the other bulbuls, it certainly is somewhat untidier and weak-looking and is normally placed in open dry bushes or around a bush which is surrounded by some dry vegetation. The nest is generally situated under three feet from the ground and the adult birds get very restless when their nest is approached.

SPOTTED BABBLER (*Pellorneum ruficeps*)

This is one of the many forest-birds which are extremely difficult to spot but are not infrequently heard. The lovely whistling calls of

this babbler are a quite common bird-call in these forests during the rains when they are breeding.

On 21st 1982, SGM found a nest of this babbler in heavy bamboo forest in the neighbourhood of Namgir. The frequent calling of the birds and their very peculiar behaviour was an asset to locate the nest. The nest itself was a roundish structure, atleast 6-7 inches in diameter and it was built of thin, and also, thick grasses, bamboo leaves and dry leaves. It was placed on the forest floor in damp bamboo forest and it appeared like a small heap of rubbish, superbly hidden on the ground. It may be mentioned here, that just a few days ago SGM had found a nest of this bird in the Borivli park, near Bombay. This nest was equally untidy and shabby, though somewhat smaller.

SLATYHEADED SCIMITAR BABBLER
(*Pomatorhinus horsfieldii*)

On 23rd January 1983, when walking on the Daman Mahal mountain we heard these lovely musical two note whistles which were being replied to by another bird. These 'reply' whistles were followed by a harsh kharrrrr of a somewhat extended duration. The calls continued for a rather long time and we decided to check the producers of these calls. This was in a luxuriant bamboo forest and we slowly approached the flute-like notes. We decided to wait on a fallen tree-trunk from where we could obtain glimpses of two or three birds which were chasing one another and frequently diving into the bamboo growth. After a few minutes the calls increased to four notes and these SGM readily recognized as the calls of *Pomatorhinus horsfieldii* which he has so often heard around Bombay. It was but only after a considerable period of time that we managed to get a good view of the birds. There were

three of them and it appears they were getting ready to breed. SGM similarly noticed great activity of this babbler around Bombay in the second week of January and he feels that *P. horsfieldii* breeds in the neighbourhood of Bombay (where, by virtue of its calls it happens to be a relatively common bird) during February-April. In the Dangs forests, south of the Tapti river juvenile birds were collected on 14th March (Sálim Ali, *JBNHS* 52:751). This happens to be the only occasion that we ever saw the Scimitar Babbler in the Rajpipla forests, though it may be heard more often.

WHITETHROATED BABBLER
(*Dumetia hyperythra*)

On 21st July 1982, SGM found a nest of this babbler in close proximity to that of *Pellorneum ruficeps* also located on the same day. There are some amazing similarities in the nests of *D. hyperythra* and *P. ruficeps*. Both the nests were more or less ball shaped structures placed on the ground in damp bamboo forest. Both nests were on gently sloping hills with their entrance holes facing downwards so that when the birds would fly from their nest, they would fly straight downhill and then perch on some small bush. Both nests were less than ten feet distance from much used forest paths. However, it may be stated that the nest of *D. hyperythra* was much more difficult to spot. This nest was a small ball of thick, coarse bamboo leaves with an inside cup of thin fibrous grasses and also a few hair. There was an oval entrance hole on one side, facing downhill. The entire ball-nest was about four inches in diameter and it was sort of anchored between two small stones at the base of a bamboo clump, an inch or so above the ground. But the most interesting part of this nest was a fallen large leaf of *Tectona grandis* which had been actually fix-

ed into the sides of the nest in a most artistic manner. Many such large leaves of Teak were scattered on the forest floor and the use of one such leaf into the nest was undoubtedly a remarkable attempt at both camouflage as well as shelter. This leaf formed an efficient umbrella over the nest. While the leaf covering the nest was wet due to rain, the nest proper and the inside cup were completely dry. Moreover, the leaf covering the nest made it all the more difficult to locate the nest. There were three eggs in the nest on 21st July. The eggs had a very pale pinkish white ground colour and were rather thickly spotted and blotched with pale purple and reddish-brown. They were smaller in size than eggs of the House Sparrow.

YELLOWEYED BABBLER
(*Chrysomma sinense*)

Sometimes seen around the PWDRH at Dediapada and also around Rajpipla town and near the Karjan river. Occasionally seen in forest along Samot road and once in July a party of three birds was seen on the Mozda riverbed, flitting in and out of the vegetation. Frequently the birds would utter a pleasant warbling song from some exposed position. A search for nests did not yield any and it appears that the birds were evidently commencing to breed.

However, north of the Narmada river, at Chandod and also around Wadhvana tank at Dabhoi we located several nests in July 1981. Most of these nests were under construction though one of them contained two eggs in the second week of July. The egg is thickly spotted and blotched with pale brownish-red and also some purplish shade. The ground colour of the eggs was pale pinkish-cream. Some of these nests were in thorny bushes and trees.

COMMON BABBLER (*Turdoides caudatus*)

Found breeding at Chandod where we located two nests in June-July 1981. Both the nests were in dense thorny scrub and while one of them was being built on 8th June (but later destroyed by a village boy), the other contained three eggs on 11th July. The nests can be likened to nests of *Pycnonotus cafer* though somewhat more deep and more loosely made and lacking any cobweb. The eggs are a lovely shade of glossy blue and are more or less the same size as eggs of *P. cafer*. The birds distinctly prefer scrub covered areas where they are normally seen in small parties of 4-6 birds. At Channi, on the outskirts of Baroda, SGM noticed in July 1979, a pair of *Clamator jacobinus* not far from the nest of *T. caudatus*. In the first week of July when the nest contained two eggs, a solitary cuckoo was seen to enter the bush which contained the nest. It was driven away by the babblers but it continued to go there after about twenty minutes. SGM feels that the cuckoo had probably laid its egg in the babbler's nest.

LARGE GREY BABBLER (*Turdoides malcolmi*)

This babbler is a common bird in the open and scrub countryside here. The bird is always seen in small parties which it appears do not break up even during the breeding season. We observed this babbler carrying nesting material in July. Though no actually occupied nest of this babbler was found, it appears that they breed sometime between May-August. This babbler is one of the few which is selected as a foster parent by the Pied Crested Cuckoo (*Clamator jacobinus*) of which we saw a few examples only in mid-July in the forests.

About *T. malcolmi* we may add that it hap-

pens to be one of the most gregarious species of birds. On 12th June 1982, three birds were seen in open country a few kilometres from Dediapada towards Mozda and found breeding at Chandod.

JUNGLE BABBLER (*Turdoides striatus*)

We did not come across any rufous-tailed race (*T. s. somervillei*) in the Rajpipla area.

In its habits we would like to state that it is not appreciably different in any respect from *T. malcolmi*. However *T. striatus* is certainly a more common bird in the forest area. A few of these birds can be seen on almost every outing in the forests. A nest containing two nestlings was found at Chandod, just north of the Narmada river in mid-June 1981. The nest is a rather loosely put together cup of grass stems, small bent sticks including a few thorny sticks. It is normally built in some thorny bush or tree, generally under eight feet from the ground in a fork, preferably one just jutting out of the main stem. Little, if any attempt is made at concealing the nest and infact the noisy nature of the birds makes it all the more easier to locate the nest. Even around a nest containing nestlings, small parties of this babbler move about and it would not be surprising if other babblers, besides the parents, feed the nestlings too. Infact on the very tree which contained a nest of *T. striatus*, SGM saw on two occasions *T. malcolmi* and the former did not seem to mind this intrusion at all.

On 21st July 1982, Jungle Babblers were observed making nests in the forests along Samot road where SGM saw them carrying grass and thin sticks. On this very day he also noticed great activity among *Clamator jacobinus*, of which the Jungle Babbler is a much sought after foster parent.

BROWN FLYCATCHER (*Muscicapa latirostris*)

SGM and Eric D'Cunha saw this bird in December 1982. There was a solitary bird. Probably this flycatcher should be more common here but because of its silent nature and its dull coloration coupled with its small size, it is a difficult bird to be seen in the forest. Sálím Ali came across this bird only in the Dangs area south of the Tapti where he presumes the birds to be resident (*JBNHS* 52: 746).

REDBREASTED FLYCATCHER
(*Muscicapa parva*)

This flycatcher is a common cold weather migrant to these forests. It can be seen everywhere in the forests and we saw one almost at the top of Daman-mahal mountain. Seen at Dediapada and in Rajpipla town and around Juna-Rajpipla forests in December-January. The birds prefer the shaded patches of forests and their faint *clikrrr...* and *tttrrrr...* notes are commonly heard in the forests. Often one may come across this bird in a small mixed group of forest birds.

TICKELL'S BLUE FLYCATCHER
(*Muscicapa tickelliae*)

Certainly the commonest resident flycatcher in these forests. Seen in almost every kind of forest, the bird having a marked preference for dense bamboo growths. Seen throughout the forests at Piplod, Dumkhal, Sankhdi, Namgir, Samot road, Mozda, Juna-Rajpipla and elsewhere. Observed also in the neighbourhood of Rajpipla town and a pair was frequently seen in the vicinity of dense undergrowth of the garden of the hotel we were staying in at Chadod, north of the Narmada. Here the pair was busy constructing its nest in a hole in a mud-wall around a bamboo bush in mid-June.

On 12th June 1982, a nest of this flycatcher was found in a small hollow of a tree in forest near Namgir. The nest was a well-made pad of fine grasses and a few scattered feathers. It contained a single brownish white egg, spotted lightly with reddish-brown. This bird frequently utters a pleasant short song, somewhat metallic in tone and this we heard even in December. Besides this song, the bird also has a harsher clicking and churring note which SGM heard while he was inspecting the nest of this flycatcher.

GREYHEADED FLYCATCHER
(*Culicicapa ceylonensis*)

Sálím Ali during his Gujarat Ornithological survey came across this bird only in Cambay and at Hathidhara (Palanpur) and he presumed this bird to be a not common winter visitor (*JBNHS* 52:747-48).

In January 1982, we observed a few examples of *Culicicapa ceylonensis* in the forests around Juna-Rajpipla. In June 1982, a solitary bird was seen around the forest stream at Namgir for several consecutive days. This particular bird seen in June had a peculiar habit of fly-catching over the stagnant water that had collected on the otherwise almost dry bed of the stream. The bird would remain motionless on a fallen log just over the accumulated stagnant puddle around and over which there was always to be seen a fantastic number and array of mosquitoes and various small insects and beetles. Every few minutes the bird would swoop down almost touching the water on every such swoop and always there could be heard a sharp snap of its mandibles as the countless insects would be disturbed. For several days we observed this flycatcher at this puddle but we never saw it again after 11th June. Often the bird allowed our very close approach.

It was however in December 1982 that we found *C. ceylonensis* extremely common in the forests around Namgir and elsewhere. In three days SGM and Eric D'Cunha had 27 sightings of this flycatcher. Sometimes the bird would utter shrill, musical calls of 4-7 notes. Again in January 1983, we found this bird fairly common here.

We never obtained any signs of this flycatcher breeding in the Rajpipla forests. This bird is a common resident species in the central Satpuras (S. D. Ripley in SYNOPSIS). In 'Bird Life in MP' (*JBNHS* 53:609), C. E. Hewetson considers this flycatcher as one of the commonest and most widely spread small resident birds. B. B. Osmaston found this bird common in the ravines in and around Pachmarhi in the central Satpuras where he states they breed in June-July (*JBNHS* 28:455).

Our observing this flycatcher in such good numbers in December-January would probably support Sálím Ali's presumptions that *C. ceylonensis* is a winter visitor to Gujarat (Satpuras), but we feel that a few birds presumably breed in the Rajpipla area at the western extremity of the Satpuras.

WHITEBROWED FANTAIL FLYCATCHER
(*Rhipidura aureola*)

First seen in January 1983 in open forest in the neighbourhood of the Karjan Dam (under construction). We then saw this flycatcher on three occasions in forest around Namgir.

WHITETHROATED FANTAIL FLYCATCHER
(*Rhipidura albicollis*)

Seen in forest around Namgir and once also along the Samot road. In December we saw it in the Juna-Rajpipla area and in the neighbourhood of Rajpipla town. Nowhere, a common bird. No indication of its breeding.

PARADISE FLYCATCHER
(*Terpsiphone paradisi*)

On 19th June 1981, SGM found a nest of this flycatcher in a small creeper-bound tree along the Mozda river near Sankhdi. About ten feet from the ground, the nest was in such a position that if the creeper was pulled then there was every possibility of the nest being damaged. This fear almost compelled SGM to collect the nest and its contents. Only half an hour later when SGM again went to check the nest there was no sign of the nest on the tree. It was not long before the cause of this mishap was brought to light and the nest and its contents (surprisingly an intact egg alongwith smashed eggshells) were found and collected from the ground nearby. It so appears that some adivasi kids who had been playing around when the nest had been first located had pulled the branch with a jerk so that it had almost broken off and the nest thrown out. From the condition of the yolk of the smashed eggs in the nest it seemed as though the eggs were almost on the verge of hatching. The solitary egg was collected by SGM and is presently in his collection in Bombay. It is pale creamish-pink in ground colour, lightly spotted and blotched with reddish-brown. It is almost an exact, though miniature, replica of the eggs of *Dicrurus adsimilis*. The nest was not collected as its inside had been spoilt by the spilled contents of the smashed eggs.

Not far from this spot (almost opposite Sankhdi) a male Paradise flycatcher in white adult plumage was seen. Nearby were two females. In January we came across this bird around Juna-Rajpipla while in December 1982 and in January 1983, we found this bird rather common in the forests. In May-June we completely failed to come across this bird any-

where in the forests, but in July SGM noticed a female in the forest not far from Namgir.

Sálim Ali (*JBNHS* 52:750) hazards a guess that *T. p. paradisi* breeds in Rajpipla and in the Dangs. Further, he states that *T. p. leucogaster* is purely a winter visitor and a passage migrant in this area. As such, it cannot be completely ruled out that the good numbers of *T. paradisi* that we saw in Dec.-Jan. in these forests probably consist of both *T. p. paradisi* and also *T. p. leucogaster*, a few *T. p. paradisi* remaining here to breed. This bird has also been reported to breed in the Gir Forest of Junagadh by K. S. Dharmakumar-sinhji (*JBNHS* 48:188).

The status of *T. paradisi* appears to vary from one locality to another (Sálim Ali: 'Birds of Gujarat' *JBNHS* 52:750).

B. B. Osmaston (*JBNHS* 28:455) stated that some birds breed around Pachmarhi in the central Satpuras while Rev. F. S. Briggs presumed this flycatcher to be resident around Mhow (*JBNHS* 35:386). C. E. Hewetson (*JBNHS* 53:609) in 'Bird Life in MP' regarded *T. paradisi* as a summer migrant in MP, arriving in the last week of March and common till the rains break when many birds move on and a few nesting birds probably staying throughout the rains. He also writes that the number of birds vary from year to year.

BLACKNAPED FLYCATCHER
(*Hypothymis azurea*)

Writing of this flycatcher, Sálim Ali found it one of the commonest birds in the bamboo, teak and mixed deciduous forests here. He probably found it so in the Surat Dangs (*JBNHS* 52:749-50). In the Rajpipla area, north of the Tapti and the Dangs, we would hesitate to regard this as one of the five commonest birds in these forests.

We saw this bird only on a few occasions in the bamboo forest around Namgir and in forest along the Mozda-Namgir and Mozda-Samot roads. Along the Namgir road a pair was apparently breeding in the second week of June, though we did not find the nest. A male in very bright plumage was also once seen near Piplod. It remained around a bamboo clump for a few minutes and then with a sharp call it vanished like a gem into the dark and deep of the forest. The breeding season here should range between June-August.

STREAKED FANTAIL WARBLER
(*Cisticola juncidis*)

In July, 1982, when good rains had encouraged a growth of grass and vegetation around the Mozda river and also around Dediapada, the *chik..chik...* calls of *C. juncidis* could often be heard. We observed a few of these warblers displaying in the air and calling incessantly, their sharp *chik..chik..* calls carrying for a good distance. Undoubtedly, the birds were either breeding or were getting ready to do so. Also in the same month, a pair of these warblers were noticed to be very active and noisy in a grass covered forest clearing, near Namgir. In January 1983, we noticed this warbler on the Karjan river, about 10 km from Rajpipla town.

FRANKLIN'S WREN WARBLER
(*Prinia hodgsonii*)

A solitary bird in breeding plumage, with the dark breast band, was observed in July 1982 in cultivation around Mozda. The bird was noisy and was probably breeding. Near Baroda SGM noticed this bird commence nest-building in the second week of June while he has found several nests with eggs and/or

nestlings in July and August in and around Bombay.

PLAIN OR TAWNYFLANKED WREN WARBLER (*Prinia subflava*)

Seen around Dediapada (PWDRH) in July and near Chandod, north of the Narmada. Not a common bird. The birds were certainly breeding around the PWDRH at Dediapada, in the long grass and scrub in July. A couple of pairs were engaged in a series of sharp trilling notes and when the bird flies it sometimes produces a sharp snapping noise.

ASHY WREN WARBLER (*Prinia socialis*)

This is basically a bird of open country but it has also penetrated the forests in small numbers. We found two nests in the forests, one of them around Namgir and the other not far from Mozda in June when it was under construction. The nest found near Namgir contained two eggs on 10th June 1982. Both these nests were under four feet from the ground and while one of them was constructed in one large leaf, three leaves were utilised in the nest near Namgir. This nest was a rather deep cup among the three leaves which had been sewn together.

We also saw this warbler elsewhere between Mozda and Dediapada, at Juna-Rajpipla, along the Karjan river, around Rajpipla town and also at Chandod, north of the Narmada where a pair was building its nest about eight feet high among the leaves of a tree.

JUNGLE WREN WARBLER (*Prinia sylvatica*)

Occasionally seen in the outskirts of forest, particularly around grass-covered stony localities in the vicinity of some stream. In July a solitary bird was seen near Namgir in forest.

Seen also around the PWDRH at Dediapada.

TAILOR BIRD (*Orthotomus sutorius*)

Certainly the commonest warbler here. Good numbers of this bird have reached into the forest and it was not at all surprising to hear a couple of these warblers almost at 3000 feet on Daman mahal mountain, quite a distance from any human habitation. This bird may be seen and heard in many other places in the forest, its loud *towit, towit...* call being a rather commonly heard birdcall here. Several nests were found in the forest in June and July. Banga found one with four eggs in a small bush in July. Nests in various stages of construction were also located along the Mozda-Namgir road. Also seen around the PWDRH at Dediapada and at Rajpipla town where it is more of a common garden bird. Construction was under way at Chandod in the second week of July.

ORPHEAN WARBLER (*Sylvia hortensis*)

A winter visitor. Not common. Infact we have seen this largish warbler only twice in January, in light scrub forest around Juna-Rajpipla, and once in the vicinity of Rajpipla town near the Karjan.

LESSER WHITETHROAT (*Sylvia curruca*)

Seen very clearly only once near the PWDRH at Dediapada in December. (The Leaf-warblers are not at all common in the Rajpipla area. Atleast we did not find them so. We observed only three different kinds of them, two of them around Rajpipla and Dediapada, and only one in the forest. Due to uncertainty in their field identification, we do not wish to comment any more on the genus *Phylloscopus*).

BLUETHROAT (*Erithacus svecicus*)

We first saw the Bluethroat (a solitary red-spotted male) along the river, hopping amongst the stones and scant vegetation at Juna-Rajpipla. A few days later, we again saw the bird nearby.

In December 1982, Eric D'Cunha and SGM saw a male *E. svecicus* twice along a forest stream at Namgir. One of these males was in very bright plumage, the red spot being bright and prominent.

This bird happens to be an uncommon winter visitor to this area.

MAGPIE ROBIN OR DHYAL
(*Copsychus saularis*)

Often seen in the forests at Mozda, Namgir, Piplod, Dumkhal etc., and we also saw it in January in the Juna-Rajpipla forests. This graceful bird can also be sometimes seen in gardens in Rajpipla town. We also saw it around Dediapada, where a nest with three eggs was found near the PWDRH. At Namgir we located two nests of this robin. One of these had three nestlings on 24th June, while the other contained two full fledged nestlings on 21st July. On 19th June a nest containing two eggs was found in the hollow of a very big tree at Piplod. We also found this bird breeding north of the Narmada river, at Chandod, where we had a nest containing five eggs destroyed by a village kid. Birds are in song at this time of the year, though the *sweeee... sweeee...* call can often be heard during the winter months too.

SHAMA (*Copsychus malabaricus*)

On 11th June 1982, a solitary *C. malabaricus* was noticed in a semi-evergreen patch of forest, several kilometres from the Mozda road. This happens to be our only sighting of this bird

in the Rajpipla area, north of the Tapti river. The previous northernmost recorded distribution of this bird is from the Surat Dangs forests, about 100 kms south of the present sighting (*JBNHS* 52:769). As such there seems to have been a northward extension of this bird.

S. D. Ripley in SYNOPSIS gives the range of *C. m. malabaricus* as "The western Indian peninsula from Surat Dangs south along the Western Ghats." The range of *C. m. indicus* is given as "Himalayan foothills and plains from Kumaon through Bhutan, eastern India and Bangladesh south to Chittagong, and again from Bihar (Rajmahal Hills) south through eastern MP (Chanda, Balaghat, Raipur, Bastar) and the Eastern Ghats to the Cauvery river."

BLACK REDSTART (*Phoenicurus ochruros*)

A winter visitor. Not common. In December and January this bird was seen at Juna-Rajpipla, Dediapada, Rajpipla town and in several other places.

STONE CHAT (*Saxicola torquata*)

A common winter visitor to the area. The bird prefers open country and in December-January we often came across this bird around the PWDRH at Dediapada and also around Rajpipla town.

PIED BUSH CHAT (*Saxicola caprata*)

We found this bird breeding in the vicinity of Narmada river at Chandod. In the second week of June 1981, SGM found a nest of this bird containing two eggs. The nest was in a hole in a mudwall flanking a much used path leading to the Narmada river. The nest was a roughly built pad of fine grasses and a good

amount of hair. Unfortunately this nest was destroyed by some village boys.

DESERT WHEATEAR (*Oenanthe deserti*)

An uncommon winter visitor. We saw this bird only twice in December and in January several miles from Dediapada and once near the Karjan river. Not seen anywhere else.

INDIAN ROBIN (*Saxicoloides fulicata*)

A common bird in the dry open countryside around Dediapada and around Rajpipla town. We found a good number of nests of this bird. On 12th June, a nest with two nestlings was located along the road in a mudwall, a couple of kilometres near Mozda at Bal.

It is however north of the Narmada river, in the broken ravinous countryside around the river, that *S. fulicata* is a very common bird. We found atleast fourteen nests of this bird here in the first two weeks of June.

MALABAR WHISTLING THRUSH
(*Myiophonus horsfieldii*)

In 'Birds of Gujarat' (*JBNHS* 52:775), Sálím Ali records *M. horsfieldii* only from the Surat Dangs forests, south of the Tapti river.

S. D. Ripley in SYNOPSIS gives the range of *M. horsfieldii* as, Abu, hills of western Gujarat, the Dangs and the Satpuras (Pachmarhi, Melghat).

We first came across the Malabar Whistling Thrush in the Rajpipla forests in June 1981 when it was seen along a flowing forest stream and then again in a more or less similarly forested country around a forest stream not far from Piplod. This was quite on the base of Daman-mahal mountain. We never saw this bird elsewhere in these forests. The second time when we saw this thrush, the bird was in song.

WHITETHROATED GROUND THRUSH
(*Zoothera citrina*)

The only example of this species met by Sálím Ali during his Gujarat State Ornithological survey was in Navsari district, south of the Tapti river (*JBNHS* 52:770). Besides this specimen, the only other evidence of the presence of the bird in Gujarat is a specimen collected by E. M. Shull on 17th August 1954, with enlarged ovaries, thus indicating that the breeding season of *Z. citrina* in the Dangs is July-August (*JBNHS* 69:659).

In Rajpipla we found this thrush quite common in the better wooded parts. Our sightings of this bird in the Rajpipla area thus happen to be the northernmost in Gujarat. The birds were noticeably more often seen around Namgir in forest, where we were staying. In the first week of July 1981, this thrush was observed building its nest. Breeding was evidently in progress in July the next year too. SGM was baffled by the good variety of rich notes of this thrush in mid-July 1982, when a pair certainly had a nest but which could not be located. The breeding season of *Z. citrina* in Rajpipla forests should range between July-September. Around Betul in the MP Satpuras, this bird has been heard in song in April, but presumably breeding is later. B. B. Osmaston found this bird not uncommon around Pachmarhi in the central Satpuras in MP (*JBNHS* 28:456).

BLACKBIRD (*Turdus merula*)

The only occasion that we saw *T. merula* in the Rajpipla forests was on 4th January 1982 when trekking towards Upla-Juna-Rajpipla. A solitary male flew away along a forest stream into the bamboo forest nearby. We failed to locate this bird elsewhere on any of our further visits.

GREY TIT (*Parus major*)

A common bird in the forests where we observed it almost all the way from Bal towards Dumkhal and once also more than half way up Daman-mahal hill. A pair was also once seen in the vicinity of the PWDRH at Dediapada and in light forest along the Karjan river, a few kilometres from Rajpipla town. In the forests the Grey tits were apparently breeding in good numbers as could be understood by their very noisy and demonstrative nature and by their frequent entering of cavities and holes in trees and at times driving away other intruding birds from the vicinity of these potential nest sites.

YELLOW-CHEEKED TIT
(*Parus xanthogenys*)

Often seen in the forests, though certainly not as common as *Parus major*. Seen at Namgir, Piplod, Daman-mahal hill, Mozda and once along the Karjan river in light forest. Sometimes we noticed a few of these birds entering into natural small cavities in trees and it appears that the birds were breeding in the first two weeks of June. We failed to check any of these cavities for eggs or nestlings.

SPOTTED GREY CREEPER
(*Salpornis spilonotus*)

This bird is considered to be quite common in the dry deciduous forest here. However, we saw this bird for the first and only time here on 11th December when SGM and Eric D'Cunha were birdwatching in the forest a few kilometres from Namgir. There was only one bird and it was moving up a thin stem. We feel that this bird is one of the very difficult birds to be seen in forests here and we possibly overlooked it.

(Pipits on the lawns of the palace at Rajpipla, SGM observed some Tree-pipits (*Anthus*) in the first week of January 1982. There were atleast 15-20 birds in that small flock which was initially on the ground but on being approached took off and settled into the nearby trees. This is the only occasion that we saw these pipits in the Rajpipla area).

PADDYFIELD PIPIT
(*Anthus novaeseelandiae*)

Nowhere common. Infact we saw this bird only around the Narmada river, around the Karjan river and once near the PWDRH at Dediapada in a field. No indication of its breeding.

FOREST WAGTAIL (*Motacilla indica*)

SGM and D'Cunha saw this bird on 10th Dec. 1982 in forest near Namgir. The bird was on a forest stream on the ground. In 'Birds of Gujarat' (*JBNHS* 52:779), Sálím Ali came across this wagtail only in the Dangs forests south of the Tapti river and nowhere else though he also presumes that it may occur in the Gir forests of Junagadh in Saurashtra. In SYNOPSIS S. D. Ripley gives the winter range of *M. indica* as the Western Ghats complex from Mahableshwar southwards. *M. indica* has also straggled to Kutch in Gujarat. Also, *M. indica* is an irregular winter visitor to the Bombay area.

GREYHEADED YELLOW WAGTAIL
(*Motacilla flava thunbergi*)

Seen in small numbers in December-January in the palace lawns in Rajpipla, around the PWDRH at Dediapada and occasionally even along the forest streams. SGM has once seen this bird till as late as the first week of May in the neighbourhood of Baroda city.

BLUEHEADED YELLOW WAGTAIL
(*Motacilla flava beema*)

This race of *M. flava* can be distinguished from *M. f. thunbergi* by the presence of a distinct white superciliary stripe over the eyes. We saw this wagtail and confirmed its identity on atleast five occasions. It happens to be a somewhat less common winter migrant than *M. f. thunbergi*. We saw it around Dediapada, at Juna-Rajpipla (on river-bed) and along the Mozda river.

BLACKHEADED YELLOW WAGTAIL
(*Motacilla flava melanogrisea*)

In January 1982, we came across a solitary bird on the Karjan riverbed which was of this race. We never saw this bird again in the area on any of our subsequent visits.

GREY WAGTAIL
(*Motacilla cinerea*)

A common winter visitor to the area. Seen in good numbers on the Karjan river. Seen in association with other wagtails around Dediapada. Also seen in the neighbourhood of Rajpipla town, and occasionally even in the forest along streams. Near Baroda, SGM once saw this wagtail in bright breeding plumage, with black chin and throat and foreneck (with a prominent white moustachial streak) on 11th May.

WHITE WAGTAIL
(*Motacilla alba*)

A winter visitor. Quite common. Seen on several streams and rivulets along the road between Dediapada and Rajpipla, near the PWDRH at Dediapada, on the Karjan and Narmada rivers and also along forest streams occasionally. This wagtail normally prefers to remain in pairs and does not seem to like associating with other wagtails.

LARGE PIED WAGTAIL
(*Motacilla maderaspatensis*)

A common bird on the Narmada river and we also saw it on the Karjan, around Dediapada and also along the Mozda river. On the banks of the Narmada river, a few kilometres on either side of Chandod, we found this bird breeding in good numbers, both on the northern as well as on the southern banks of the river. In the first two weeks of June '81, SGM located five nests of this wagtail. While two of these nests were actually built in holes on flat and stony ground, the remaining three nests were in cavities in rocks and one in the mud-wall along the river. The two nests in rock cavities were big and thickly built cups of grasses, fibres, hair and a lot of moss. The nests in the holes on flat ground were more like lark-nests, though somewhat deeper and thicker. Only two of these nests actually contained nestlings in them while in two others, the nestlings could be seen around the nest. Just a day after SGM found the two nests with nestlings in them, the young birds had come just out of the nest and the parents could be seen going to different places with food in their beak because the nestlings had all scattered around the nest. Infact from one of these nests, the nestlings flew out only when SGM put his hand inside the hole to check. Hardly had he done so when four young wagtails, lacking the long tails which are so characteristic of them, barged out of the nest, uttering sharp squeaky calls and one of them actually settled on SGM's shoulder. This sudden coming out of the nest of the nestlings at intrusion, greatly agitated the adult wagtails who ventured extremely close to SGM with some large worms in their beaks. The parents made a number of visits to feed their nestlings. It was observed that they were

collecting the food for the nestlings from a small moss covered puddle, some fifty odd feet from the river.

THICKBILLED FLOWERPECKER
(*Dicaeum agile*)

Occasionally seen in forest. A rather uncommon bird.

TICKELL'S FLOWERPECKER
(*Dicaeum erythrorhynchos*)

Often seen. A noisy bird, also met with in Rajpipla town environments, around the Karjan river and even at Dediapada. No signs of breeding.

PURPLERUMPED SUNBIRD
(*Nectarinia zeylonica*)

Ripley in SYNOPSIS gives the range of this bird as "Peninsular India, south of a line from Nasik (NW. Maharashtra), Jabalpur (central MP), Lohardaga (Bihar), southern Bengal and Bangladesh southwards into India.

Salim Ali in 'Birds of Gujarat' (*J. Bombay nat. His. Soc.*, 52:787) states as having only a single unconfirmed sight record of *N. zeylonica* from Pavagadh in Panchmahals district of Gujarat.

We have two sightings of this sunbird. While one of these was in an orchard several kilometres from Netrang, the other was seen in light forest along the Karjan river. As such, we would state that *N. zeylonica* is present, certainly in very small numbers, in the Rajpipla area north of the Tapti river, and probably also elsewhere in south-eastern Gujarat.

SMALL SUNBIRD
(*Nectarinia minima*)

We first saw some tiny sunbirds with deep crimson on their throat and breasts just behind the residence of the forest guard at Pip-

lod on our very first day in these forests in the third week of June '81. There were about six to eight birds and though we had not properly identified them we were definitely sure that they were not *N. zeylonica* or *A. siparaja*. The upper plumage of these sunbirds we had seen in Rajpipla forests was also a lovely shade of deep crimson (somewhat less bright than the breast), in no way similar to the red-scarlet of *A. siparaja*. The head and crown were metallic greenish. There was a darkish band below the deep crimson on the breast. Also, the underparts below the breast were very yellow and not half as bright yellow as in *N. zeylonica*. The crimson on the breast of these birds was also much deeper than on that of *N. zeylonica*, also, in which, the crimson does not extend so deep down the breast.

When back in Bombay in late July '81, we checked all the references and all the *Nectarinia* species in the BNHS collection. On examination of all these specimens we noticed that the tiny sunbirds we had observed from so close in the forest guard's compound at Piplod in the Rajpipla forests completely matched the description and the specimens of *Nectarinia minima*.

In May '82, when we again went to these forests we came across this sunbird in forest around Namgir. RKN now saw this bird from the hide while photographing Serpent Eagle from very close, and he noted down all the details of the birds he had seen. We once again reviewed the specimens in the BNHS collection and we feel that *Nectarinia minima* has probably extended its range northwards into South-eastern Gujarat, in the area between the Tapti and Narmada rivers, and presumably also in the Dangs forest, south of the Tapti and at the northern extremity of the Western Ghats.

Presently the northernmost sighting of

N. minima are from Suriamal, north of Bombay.

PURPLE SUNBIRD
(*Nectarinia asiatica*)

A common bird in the area, both in the forests as well as in the towns here. A nest with two eggs was found in the compound of the PWDRH at Dediapada. Males in bright plumage were very noisy and demonstrative in January and it appears that this bird certainly breeds twice in a year. In the vicinity of Bombay, SGM has found nests with eggs and/or nestlings in January, March, June, July, September and also in November. This certainly indicates that *N. asiatica* breeds irregularly, atleast around Bombay.

YELLOWBACKED SUNBIRD
(*Aethopyga siparaja*)

Present in appreciably good numbers in these forests. We also saw this bird from the hide when photographing the Serpent Eagle. No signs of breeding during any of our visits to the area. Presumably breeds after the onset of the rains.

Sálim Ali (*J. Bombay nat. His. Soc.* 52:788) records the northward extension of *A. siparaja* to the Rajpipla area and further towards the Narmada river.

WHITE-EYE (*Zosterops palpebrosa*)

Quite a common bird in the area, particularly in light open and scrub forest where this bird is always seen in small parties, often along with some other small avian denizens of the forests and scrubs. In December and January this bird was noticeably more common around Dediapada.

HOUSE SPARROW
(*Passer domesticus*)

Common till Dediapada, but after that it becomes noticeably less common towards Piplod and Dumkhal. Breeding almost everytime we went. At Mozda, one of the best sites of this bird's breeding is the ashram.

YELLOWTHROATED SPARROW
(*Petronia xanthocollis*)

There are definitely some local seasonal movements of this species in this area, as is also probably in the neighbourhood of Bombay. This is a common bird in the forests here and the birds were certainly nesting in May-June. However, in July SGM came across very few (almost negligible) of these sparrows here. In December-January we saw small flocks of a dozen to as many as seventy or so of *P. xanthocollis* in the forest here, particularly around the Karjan river. SGM noticed similar, infact once a flock of atleast 150-200, of this sparrow in the Borivli park — Bombay in December-January. In the third week of February there were none or very small flocks of 6-10 birds here, most of the flock having split into pairs some of which had infact commenced breeding by this time.

BAYA WEAVER
(*Ploceus philippinus*)

A noticeably uncommon bird at and around Dediapada, though, in the open countryside south and north of the Narmada, small scattered breeding colonies of the baya may be observed almost anywhere. In Dediapada town, a small breeding colony of six completed and one partly built nests was noticed on a date palm in July '82. There was however only one male to be seen there.

GREEN MUNIA

(*Estrilda formosa*)

Thrice we saw this bird in small groups. The birds keep to the low vegetation. Seen along the Mozda river, Samot road and once near Moti-Singloti, several kilometres from Mozda towards Dediapada. No signs of breeding.

SPOTTED MUNIA

(*Lonchura punctulata*)

In July this bird was seen near Dediapada and then in January in the vicinity of Rajpipla town. No signs of breeding.

BLACKHEADED MUNIA

(*Lonchura malacca*)

Since we saw only a single example of this bird in the reedbeds around the Wadhvana tank at Dabhci, about 20 kms. north of the Narmada river, this bird certainly does not deserve mention in this list. But since this bird has not been included in Sálím Ali's list on 'Birds of Gujarat' (*JBNHS* 52, Nos. 2, 3 & 4) and probably also because this sighting may be the first for Gujarat state, this bird is mentioned here. In SYNOPSIS, S. D. Ripley gives the range of (*L. m. malacca*) as "Indian peninsula from Raipur (MP), Pachmarhi and Bombay (*JBNHS* 62:559-60) south into South India." The sighting of this munia at Dabhoi, north of the Narmada, is thus considerably north of the line of distribution as given by Ripley. Since this munia is also such a widely kept cage-bird everywhere, it is also probable that the bird we saw at Dabhoi was an escaped one. There was a solitary bird and no other was in sight anywhere around.

CONCLUSION

It must be stated here that Rajpipla forests contain an astonishing variety of birds, migrants and the local breeders. This area also has a good density of raptors, especially the Crested Serpent Eagles and many species of nocturnal owls. Logging as of two years ago is being carried out on a vast scale. The newly designated Piplod Bird Sanctuary is in shambles and about 40 per cent of its existing tree cover has been decimated. A network of roads to facilitate carting away lorry loads of timber has accelerated considerably the extensive deforestation of the area.

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